

**Name** Annette Kjær Ersbøl

**Nationality** Danish

**Present position** Professor in register based research

University of Southern Denmark, Faculty of Health Sciences,  
National Institute of Public Health – SDU-SIF  
Øster Farimagsgade 5A 2, DK-1353 København V  
Denmark

## **Education**

1987 MSc Eng (Chem) in statistics and biochemistry, Department of Mathematical Modelling (IMM), The Technical University of Denmark (DTU)

1991, 1992 Didactic courses for teachers at DTU and KVL

1995 PhD in statistics, IMM, DTU

2006 A 7-day intensive course in project management

2007 A 7-day intensive course in management

## **Academic Positions**

1987-1988 Research Assistant at Department of Mathematical Modelling (IMM), The Technical University of Denmark (DTU)

1989-1992 Research Assistant (biometrician) at The Department of Biometry and Informatics,  
Danish Institute of Plant and Soil Science

1992-1996 Assistant Professor at The Department of Mathematics and Physics, The Royal  
Veterinary and Agricultural University (KVL)

1996 Assistant Research Professor at the Department of Mathematics and Physics, The Royal Veterinary and Agricultural University (KVL)

1996-1997 Associate Research Professor at The Department of Mathematics and Physics, The  
Royal Veterinary and Agricultural University (KVL)

1997 Associate Research Professor at The Technical University of Denmark,  
Department

of Mathematical Modelling, Section for Image Analysis

- 1997 - 2010 Associate Professor at the Department of Large Animal Sciences, Veterinary Epidemiology, Faculty of Life Sciences, University of Copenhagen (KU-LIFE) (until January 2007: The Royal Veterinary and Agricultural University (KVL))
- 2010 - Professor at the National Institute of Public Health, Faculty of Health Sciences, University of Southern Denmark

### **Development and Management of Research Projects**

- 2011- Project leader of the projects: PASS – Post-Authorization Safety Studies (four studies each evaluating the association between a specific drug and a specific disease). The projects include 2 senior scientists and a research scientist.
- 2011 Project leader of the project: "Undersøgelse af klonalitet og forekomst af specifikke Campylobacter stammer i slagtekyllinger fra huse med vedvarende eller ofte gentagende infektioner". Funding for MLST typing of 200 isolates.
- 2008-2011 Project leader of the project: "Modelling the spread of infectious diseases by spatial statistics – methodological development and estimation of key parameters". The project included funding for 1 PhD and 1 post doc.
- 2008-2010 Project leader of the project "Animal Disease Surveillance: Development and implementation of methods for monitoring frequencies of animal diseases". The project includes 1 PhD student (Grethe Kaa Hybschmann).
- 2008-2010 Project leader of part project funded by "Forskningsudvalget for Kvæg, Koordinationsudvalget" as partial funding for a research project "Evaluation of the dairy health recording systems in the Nordic countries". The project includes 1 Danish PhD student (Ann-Kristina Lind) and 3 Scandinavian PhD students.
- 2005-2006 Project leader of the EpiLab project "Multicenter comparison of modelling tools for the evaluation of foot and mouth disease (FMD) vaccination strategies in Denmark". The project included 17 participants from 5 different countries.
- 1999-2002 Project leader of the CEPROS project "Objective evaluation of health status in Danish pig herds". Supervisor of 1 PhD student (Annette Cleveland Nielsen) and 2 more were affiliated. The project included 20 participants from 5 different institutions.
- 2000-2003 Project leader of a Danish Dairy project: "Salmonella Dublin: epidemiology".

Supervisor of 1 PhD student (Liza Rosenbaum Nielsen)

### **Partner of Research Projects**

- 2009-2011 DFFE project "On-farm animal welfare assessment for farmers and authorities", partner and co-supervisor of 1 PhD student
- 2008-2010 NKJ-funded project "Evaluation of the dairy health recording systems in the Nordic countries", partner and co-supervisor of 1 PhD student (Ann-Kristina Lind)
- 2004-2008 Marie Curie fellowships "Training Risk Assessment In Non-human Antibiotic Usage" (TRAINAU), partner, responsible for a part project at KU-LIFE and supervisor of 1 PhD student (Emmanuel Nji Abatih)
- 2003-2006 CEPROS 2 project: "Paratuberculosis and Salmonella Dublin in dairy herds", partner and responsible for the part project at KVL
- 1997-2001 IBIS project: Informatics based surveillance of infections and prevention of spread of diseases in the animal production, partner, responsible for the part project at KVL and supervisor of 1 PhD student (Mimi Folden Flensburg)
- 1998-2000 Danish Research Council project: "Epidemiological and statistical methodology studies for the investigation of multifactorial causal complexes of production diseases in farm animals, with basis in diseases in dairy cows", partner
- 1999-2002 CEPROS project: "The influence of production facilities, management strategies and medication policy on health and anti-microbial resistance in dairy cattle herds", partner, responsible for the part projects at KVL and supervisor of 2 PhD students (Jeanett Bruun, Keith Baptiste)
- 1998-2000 CEPROS project: "Health, welfare and production of swine in multisite systems", partner, responsible for the part project at KVL and supervisor of 1 PhD student (Håkan Vigre)

### **Editorial Work**

- 2003- Reviewer for *ACTA Veterinaria Scandinavica*
- 2003 Reviewer of Chapter 17: "Modelling multinomial data" in "Veterinary Epidemiologic Research" by Dohoo, Martin and Stryhn
- 2004- Reviewer for *Preventive Veterinary Medicine*

- 2004 Houe, Co-editor of the textbook "Introduction to Veterinary Epidemiology" (Eds: H., Ersbøll, A.K. and Toft, N.), Biofolia, Frederiksberg, Denmark. 398 pp
- 2006- Member of Editorial Advisory Board of *Preventive Veterinary Medicine*
- 2007- Reviewer for *Veterinary Research*
- 2007 Reviewer of chapters 4, 5, 9 og 10 in "Biologiens Videnskabsteori" by Andersen H., Emmeche C., Norup M and Sandøe P.
- 2008 Reviewer of the text book "Clinical Epidemiology" by Fletcher R.W and Fletcher S.W. (4<sup>th</sup> edition)
- 2008- Reviewer for *Epidemiology and Infection*
- 2009 Guest editor of a Special Issue of *Preventive Veterinary Medicine: GISVET 2007*
- 2009 Reviewer for Veterinary Biology
- 2009-12 Member of the Editorial Board of *Spatial and Spatio-temporal Epidemiology*
- 2010 - Reviewer for Scandinavian Journal of Public Health
- 2010 Reviewer Journal of Environmental Monitoring
- 2010 Reviewer for BMC Infectious Diseases
- 2011 Reviewer for Scandinavian Journal of Public Health

### **Evaluation of Research proposals**

- 2010, 2011 Evaluation of research application, Istituto Zooprofilattico Sperimentale delle Venezie, Sept 2010 and 2011

### **Peer-reviewed International Publications 2010-**

2010:

1. Andersen, AM, Novovic, S., Ersbøll, AK, Hansen, MB (2010). Urinary trypsinogen-2 dipstick in acute pancreatitis, *Pancreas*, **39**, 26-30.
2. Ersbøll, AK, Ersbøll, BK. Overcoming trends in irregularly spaced locations by regional polish – exemplified by estimation of the range of influence between *Salmonella* Dublin sero-positive cattle herds. *Epidemiology and Infection*, **138**, 1407-13

3. Jonsson, M.E., Norström, M., Sandberg, M., Ersbøll, A. K., Hofshagen, M. Space-time patterns of *Campylobacter* spp. in broiler flocks in Norway. *Epidemiology and Infection*, **138**, 1336-45
4. Ahmed, S.S., Ersbøll, A.K., Biswas, P.K., Christensen, J.P. (2010). The space-time clustering of highly pathogenic avian influenza (HPAI) H5N1 outbreaks in Bangladesh, *Epidemiology and Infection*, **138**, 843-52
5. Phan, V.T., Ersbøll, A.K., TE, Q. B., Hang, T. N., Murrell, D., Dalsgaard, A. (2010). Fish-Borne Zoonotic Trematodes in Cultured and Wild-Caught Freshwater Fish from the Red River Delta, Vietnam, *Vector-Borne And Zoonotic Diseases*, **10(9)**, 861-866
6. Phan, V.T., Ersbøll, A.K., Nguyen, K.V., Madsen, H., Dalsgaard, A. (2010). Farm-level risk factors for fish-borne zoonotic trematode infection in integrated small-scale fish farms in Northern Vietnam, *PLoS Neglected Tropical Diseases*, <http://www.plosntds.org/article/info%3Adoi%2F10.1371%2Fjournal.pntd.0000742>
7. Ersbøll, A.K., Ersbøll, B.K., Houe, H., Alban, L., Kjeldsen, AM. (2010). Spatial modelling of the between-herd infection dynamics of bovine virus diarrhoea virus (BVDV) in dairy herds in Denmark, *Preventive Veterinary Medicine*, **97**, 83-89
8. Phan, VT, Ersbøll, AK, Nguyen, TT, Nguyen, KV, Nguyen, HT, Murrell, D, Dalsgaard, A. Freshwater aquaculture nurseries and infection of fish with zoonotic trematodes, Vietnam. *Emerging Infectious Diseases*, **16**. Doi: 10.3201/eid1612.100422

2011:

9. Stege H, Jensen, TN, Bagger J, Keller, F, Nielsen JP, Ersbøll AK. Association between lean meat percentage and average daily weight gain in Danish slaughter pigs, *Preventive Veterinary Medicine*, 2011, **101**, 121-123.
10. Stege H, Bagger J, Nielsen JP, Ersbøll AK. Effect of breeding strategy and feeding system on the within-herd variation of lean meat percents in Danish slaughter pigs. *Prev Vet Med.*, 2011, **101**, 73-8.
11. Hybschmann, GK, Ersbøll, AK, Vigre, H, Baadsgaard, NP, Houe, H. Herd-level risk factors for antimicrobial demanding gastrointestinal diseases in Danish herds with finisher pigs: A register-based study, *Preventive Veterinary Medicine*, **98**, 190-197

12. Phan VT, Ersbøll AK, Do DT, Dalsgaard A. Raw-fish-eating behavior and fishborne zoonotic trematode infection in people of northern Vietnam. *Foodborne Pathog Dis*, 2011 , 8(2), 255-60.
13. Jeppesen DL, Ersbøll AK, Nielsen SD, Hoppe TU, Valerius NH. Low thymic size in preterm infants in the neonatal intensive care unit, a possible marker of infection? A prospective study from birth to 1 year of age. *Acta Paediatr.*, 2011, 100(10):1319-25.
14. Themudo GE, Østergaard J, Ersbøll AK. Persistent spatial clusters of plasmacytosis among Danish mink farms. *Prev Vet Med.*, 2011, 102, 75-82
15. Thygesen LC, Ersbøll AK. Danish population-based registers for public health and health-related welfare research: introduction to the supplement. *Scand J Public Health*. 2011, 39(7 Suppl), 8-10.
16. Novovic S, Andersen AM, Ersbøll AK, Jorgensen LN, Nielsen HJ, Jensenius JC, Hansen MB. Mannan-binding lectin and mannan-binding lectin-associated serine protease 2 in acute pancreatitis. *Pancreas*, 2011, 40(7), 1097-102.
17. Ahmed SS, Ersbøll AK, Biswas PK, Christensen JP, Toft N. Spatio-temporal magnitude and direction of highly pathogenic avian influenza (H5N1) outbreaks in Bangladesh. *PLoS One*. 2011, 6(9), e24324.
18. Ersbøll, A.K., Nielsen, L.R., Spatial patterns in surveillance data during control of *Salmonella* Dublin in bovine dairy herds in Jutland, Denmark 2003-2009, *Spatial and Spatio-temporal Epidemiology* (2011) 195-204.

2012:

19. Andersen SA, Petersen HH, Ersbøll AK, Falk-Rønne J, Jacobsen S. Vaccination elicits a prominent acute phase response in horses. *The Veterinary Journal*, 2012, 191(2), 199-202.
20. Malmstrøm ML, Hansen MB, Andersen AM, Ersbøll AK, Nielsen OH, Jørgensen LN, Novovic S. Cytokines and Organ Failure in Acute Pancreatitis: Inflammatory Response in Acute Pancreatitis. *Pancreas*, (2012), **41(2)**, 271-277
21. Bihrmann K, Nielsen SS, Toft N, Ersbøll AK. Spatial differences in occurrence of paratuberculosis in Danish dairy herds and in control programme participation. *Preventive Veterinary Medicine*, (2012), **103(2-3)**, 112-119.
22. Buhl, R., Ersbøll, A.K., Echocardiographic evaluation of changes in left ventricular size and valvular regurgitation associated with physical training during and after maturity in standardbred trotters. *J Am Vet Med Assoc.*, (2012), **240(2)**, 205-212.

23. Ahmed SS, Themudo GE, Christensen JP, Biswas PK, Giasuddin M, Samad MA, Toft N, Ersbøll AK. Molecular epidemiology of circulating highly pathogenic avian influenza (H5N1) virus in chickens, in Bangladesh, 2007-2010. *Vaccine*. (2012), 30 (51), 7381-7390
24. Thomsen PT, Ersbøll AK, Sørensen JT. Short communication: Automatic washing of hooves can help control digital dermatitis in dairy cows. *Journal of Dairy Science* (2012), 95 (12), 7195-7199
25. Chowdhury S, Sandberg M, Themudo GE, Ersbøll AK. Risk factors for *Campylobacter* infection in Danish broiler chickens. *Poultry Science* (2012), 91 (10), 2701-2709
26. Lind A, Thomsen PT, Ersbøll AK, Espetvedt MN, Wolff C, Rintakoski S, Houe H. Validation of Nordic dairy cattle disease recording databases-Completeness for locomotor disorders. *Preventive Veterinary Medicine* (2012), 107 (3-4), 204-213
27. Espregueira Themudo G, Houe H, Agger JF, Ostergaard J, Ersbøll AK. Identification of biosecurity measures and spatial variables as potential risk factors for Aleutian disease in Danish mink farms. *Preventive Veterinary Medicine* (2012) **107**, 134-41
28. Ahmed SS, Ersbøll AK, Biswas PK, Christensen JP, Hannan AS, Toft N. Ecological determinants of highly pathogenic avian influenza (H5N1) outbreaks in Bangladesh. *PLoS One* (2012). 7(3). e33938
29. Chowdhury S, Themudo GE, Sandberg M, Ersbøll AK. The effect of presence of infected neighbouring farms for the *Campylobacter* infection status in Danish broiler farms. *Spatial and Spatio-temporal Epidemiology*, (2012), 3, 311-322

2013:

30. Chowdhury S, Themudo GE, Sandberg M, Ersbøll AK. Spatio-temporal patterns of *Campylobacter* colonization in Danish broilers. *Epidemiology and Infection* (2013), 141, 997-1008
31. Nordsborg RB Meliker JR, Ersbøll AK, Jacquez M, Raaschou-Nielsen O. Space-Time Clustering of Non-Hodgkin Lymphoma Using Residential Histories in a Danish Case-Control Study. *PLOS One* (2013), 8 (4), e60800
32. Jeppesen DL, Ersbøll AK, Hoppe TU, Nielsen SD, Valerius N. Normal Thymic size and low rate of infections in human donor milk fed HIV-exposed uninfected infants from birth to 18 months of age. *International Journal of Pediatrics* (2013), Article ID 373790, <http://www.hindawi.com/journals/ijped/2013/373790/>
33. Bendtsen P, Ersbøll AK, Damsgaard MT, Tolstrup JS, Holstein B. Adolescent alcohol use reflects community-level alcohol consumption irrespective of parental drinking (2013), *Journal of Adolescent Health*, Accepted
34. Cantarero-Arévalo L, Ersbøll AK, Holstein BE, Andersen A, Kaae S, Hansen EH. Ethnic and migrant differences in asthma medication among children: the effect

of place of residence. *Pharmacoepidemiology and Drug Safety*, 2013, DOI: 10.1002/pds.3541

35. Christiansen C, Andersen LB, Ersbøll AK, Jeppesen E, Franz C, Wedderkopp N. Injuries in children with extra physical education in primary schools. *Journal of Medicine & Science in Sports and Exercise*, 2013, Accepted Oct 2013

36. Christiansen LB, Toftager M, Schipperjin J, Ersbøll AK, Giles-Corti B, Troelsen J. School site walkability and active school transport – association, mediation and moderation. *Journal of Transport Geography*, 2013, 34, 7-15

2014:

37. Klinker CD, Schipperijn J, Christian H, Kerr J, Ersbøll KA, Troelsen J, Using accelerometers and global positioning system devices to assess gender and age differences in children's school, transport, leisure and home based physical activity. *International Journal of Behavioral Nutrition and Physical Activity*, 2014, 11:8.

38. Bihrmann AK, Toft N, Nielsen SS, Ersbøll, AK. Spatial correlation in Bayesian logistic regression with misclassification. *Spatial and Spatio-temporal Epidemiology*, 2014, accepted

## **Disclosures**

### Professional and administrative tasks 2010-

2007-2010 Member of Academic Board on PhD Education, University of Copenhagen (KUFUR - København Universitets ForskerUddannelsesRåd)

2008-2010 Member of the Research and Innovation Council (FIU), KU-LIFE

2010- Statistical expert in The Centre for Intervention Research in Health Promotion and Disease Prevention, SDU

2011- Member of the Steering Committee for the Graduate Programme of Public Health, University of Southern Denmark

2011-2013 Member of the Board of the Danish Graduate School of Public Health Science (GRASPH)

2012- Member (substitute) of the Danish Committees for Scientific Dishonesty (UVVU), Committee on Scientific Dishonesty for Natural, Technological and Production Sciences

2013- Member of the consultant team in Danish Data Archive within Health Science (DDA-Sundhed)



## Professional Memberships

Member of the Biometric Society - Nordic region.

Member of the Danish Society for Theoretical Statistics (Dansk Selskab for Teoretisk Statistik, DSTS).

Member of the Danish Society for Applied Statistics (Foreningen for Anvendt Statistik, FAST).

Member of the K-group (chemistry) in the Danish Association of Engineers (K-gruppen i Dansk Ingeniør Forening).

Member of the RISK-group in the Danish Association of Engineers (Risiko-gruppen i Dansk Ingeniør Forening).

Member of the Danish Society for Epidemiology (Dansk Selskab for Epidemiologi).

## Member of assessment committees 2010-

2010- Statistical expert in The Centre for Intervention Research in Health Promotion and Disease Prevention, SDU

## Consultancy

1989- Private consultancy in statistics for national and international companies and organisations including

- World Health Organisation (WHO)
- National Environmental Research Institute (DMU)
- The Danish Institute of Plant and Soil Science
- European Food Safety Authority (EFSA)
- Research Centre of Forest and Landscape
- Dako Cytomation
- Danish Medicines Agency
- DAK Laboratoriet A/S / Nycomed-DAK / Nycomed

## Grants 2010-

2008-2011 Danish Research Council for Technology and Production (FTP): Funding "Modelling the spread of infectious diseases by spatial statistics - Methodological development and estimation of key parameters"

2011 Fjerkræafgiftsfonden. Grant for the project "Undersøgelse af klonalitet og forekomst af specifikke Campylobacter stammer i slagtekyllinger fra huse med vedvarende eller ofte gentagende infektioner".