

LIST OF PUBLICATIONS BY NIELS KEIDING

**A. Research Papers in refereed journals**

1. Hald, A. & Keiding, N. (1969). Asymptotic properties of Bayesian decision rules for two terminal decisions and multiple sampling. I. *J.Roy.Statist.Soc. B* **31**, 455-471.
2. Keiding, N. (1970). The variance of the  $X_2$  mutant frequency estimate in barley. *Hereditas* **66**, 263-268.
3. Hald, A. & Keiding, N. (1972). Asymptotic properties of Bayesian decision rules for two terminal decisions and multiple sampling. II. *J.Roy.Statist.Soc. B* **34**, 55-74.
4. Keiding, N., Jensen, S.T. & Ranek, L. (1972). Maximum likelihood estimation of the size distribution of liver cell nuclei from the observed distribution in a plane section. *Biometrics* **28**, 813-829.
5. Keiding, N. & Nielsen, J.E. (1973). The growth of supercritical branching processes with random environments. *Ann.Probability* **1**, 1065-1067.
6. Keiding, S., Keiding, N. & Tygstrup, N. (1974). Effect of galactose-ethanol feeding on growth in rats. *J.Nutrit.* **104**, 294-299.
7. Keiding, N. (1974). Estimation in the birth process. *Biometrika* **61**, 71-80 and 647.
8. Paulev, P.-E., Nielsen, S.L., Neumann, F. & Keiding, N. (1974). Strain-gauge versus water plethysmography. Description of simplified systems and analysis of differences and accuracy. *Med.Biol.Eng.* July 1974, 437-445.
9. Keiding, N. (1975). Maximum likelihood estimation in the birth-and-death process. *Ann.Statist.* **3**, 363-372 and **6**, 472 (1978).
10. Keiding, N. & Nielsen, J.E. (1975). Branching processes with varying and random geometric offspring distributions. *J.Appl.Prob.* **12**, 135-141.
11. Ranek, L., Keiding, N. & Jensen, S.T. (1975). A morphometric study of normal human liver cell nuclei. *Acta.path.microbiol.scand. Sect. A* **83**, 467-476.
12. Ranek, L., Jensen, S.T. & Keiding, N. (1975). Karyometry of liver biopsies in virus hepatitis. *Acta.path.microbiol.scand. Sect. A* **83**, 477-486.
13. Keiding, N. (1975). Extinction and exponential growth in random environments. *Theor.Pop.Biol.* **8**, 49-63.
14. Beyer, J.E., Keiding, N. & Simonsen, W. (1976). The exact behaviour of the maximum likelihood estimator in the pure birth process and the pure death process. *Scand.J.Statist.* **3**, 61-72.
15. Keiding, N. & Hoem, J.M. (1976). Stochastic stable population theory with continuous time I. *Scand.Act.J.* **1976**, 150-175.

16. Athreya, K.B. & Keiding, N. (1977). Estimation theory for continuous-time branching processes. *Sankhya A* **39**, 101-123.
17. Lomholt, B. & Keiding, N. (1977). Tetrabase, an alternative to benzidine and orthotolidine for detection of hæmoglobin in urine. *Lancet*, **March 12**, 608-609.
18. Transbøl, I., Jørgensen, F.S., Hornum, I. & Keiding, N. (1977). Hypercalcaemia discrimination index: A multivariate analysis of parathyroid function in 107 hypercalcaemic patients. *Acta Endocrin.* **86**, 768-783.
19. Keiding, N. (1977). Statistical comments on Cohen's application of a simple stochastic population model to natural primate troops. *Amer.Naturalist* **111**, 1211-1219.
20. Asmussen, S. & Keiding, N. (1978). Martingale central limit theorems and asymptotic estimation theory for multitype branching processes. *Adv.Appl.Prob.* **10**, 109-129.
21. Keiding, N. & Lauritzen, S. (1978). Marginal maximum likelihood estimates and estimation of the offspring mean in a branching process. *Scand.J.Statist.* **5**, 106-110.
22. Vraa-Jensen, J., Keiding, N., Kennedy, M., Grøndahl Mikkelsen, H. & Dybdahl, H. (1979). Cancerincidens i Frederiksborg Amt og statistisk analyse. *Ugeskr.Læg.* **141**, 2931-2932.
23. Græm, N., Helweg-Larsen, K. & Keiding, N. (1980). Precision of histological grading of malignancy. *Acta path.microbiol.scand. Sect. A* **88**, 307-317.
24. Aalen, O.O., Borgan, Ø., Keiding, N. & Thormann, J. (1980). Interaction between life history events. Nonparametric analysis for prospective and retrospective data in the presence of censoring. *Scand.J.Statist.* **7**, 161-171.
25. Møller, U., Keiding, N. & Engel, F. (1982). Subclassification of cells in S phase in a partially synchronized cell system. Methodological problems concerning pulse labelling of epithelial cells in the hamster cheek pouch. *Cell Tissue Kinet.* **15**, 157-168.
26. Møller, U. & Keiding, N. (1982). Circadian variations in influx and efflux of the S phase in a partially synchronized cell system. Double labelling with <sup>3</sup>H-thymidine in the epithelium of the hamster cheek pouch. *Cell Tissue Kinet.* **15**, 341-350.
27. Andersen, P.K., Borgan, Ø., Gill, R. & Keiding, N. (1982). Linear nonparametric tests for comparison of counting processes, with applications to censored survival data (with discussion). *Internat.Statist.Rev.* **50**, 219-258. Amendment vol. **52**, 225 (1984).
28. Frentz, G., Møller, U. & Keiding, N. (1982). DNA flow cytometry on human epidermis: The effect of serial biopsy sampling displaced by time. *Br.J.Dermat.* **107**, 7-14.
29. Vindeløv, L.L., Christensen, I.J., Keiding, N., Spang-Thomsen, M. & Nissen, N.I. (1983). Long-term storage of samples for flow cytometric DNA analysis. *Cytometry* **3**, 307-322.
30. Lauritzen, T., Frost-Larsen, K., Larsen, H.-W., Deckert, T., Keiding, N. & Nielsen, G. (1983). Continuous subcutaneous insulin. *Lancet*, **June 25**, 1445-1446.
31. Malchow-Møller, A., Rasmussen, S.N., Jensen, A.M., Keiding, N., Skovgaard, L.T. & Juhl, E. (1984). Clinical estimation of liver size. *Dan.Med.Bull.* **31**, 63-67.

32. Møller, U., Larsen, J.K., Keiding, N. & Christensen, I.J. (1984). Circadian-stage dependence of methotrexate in a keratinized epithelium. An in-vivo study using flow cytometry on the hamster cheek pouch epithelium. *Cell Tissue Kinet.* **17**, 483-495.
33. Møller, U., Keiding, N. & Larsen, J.K. (1984). Effect of methotrexate on cells in a keratinized epithelium with an active thymidine salvage pathway assessed by autoradiography. *Cell Tissue Kinet.* **17**, 497-507.
34. Møller, U., Keiding, N. & Hougaard, P. (1985). Circadian variation in mitotic influx in a keratinized epithelium. *Virchows Archiv B (Cell Pathol.)* **48**, 119-133.
35. Green, A., Borch-Johnsen, K., Andersen, P.K., Hougaard, P., Keiding, N., Kreiner, S. & Deckert T. (1985). Relative mortality of Type 1 (insulin-dependent) diabetes in Denmark: 1933-1981. *Diabetologia* **28**, 339-342.
36. Pedersen-Bjergaard, J. Ersbøll, J. Sørensen, H.M., Keiding, N., Larsen, S.O., Philip, P., Larsen, M.S., Schultz, H. & Nissen, N.I. (1985). Risk of acute nonlymphocytic leukemia and preleukemia in patients treated with cyclophosphamide for non-Hodgkin's lymphomas. Comparison with results obtained in patients treated for Hodgkin's disease and ovarian carcinoma with other alkylating agents. *Ann.Intern.Med.* **103**, 195-200.
37. Ersbøll, J., Schultz, H.B., Thomsen, B.L., Keiding, N. & Nissen, N.I. (1985). Meningeal involvement in non-Hodgkin's lymphoma. Symptoms, incidence, risk factors and treatment. *Scand.J.Haematol.* **35**, 487-496.
38. Andersen, P.K., Borch-Johnsen, K., Deckert, T., Green, A., Hougaard, P., Keiding, N. & Kreiner, S. (1985). A Cox regression model for the relative mortality and its application to diabetes mellitus survival data. *Biometrics* **41**, 921-932.
39. Secher, N.J., Hansen, P.K., Lenstrup, C., Pedersen-Bjergaard, L., Eriksen, P.S., Thomsen, B.L. & Keiding, N. (1986). Birthweight-for-gestational age charts based on early ultrasound estimation of gestational age. *Br.J.Obstetr.Gynaec.* **93**, 128-134.
40. Nielsen, C.T., Skakkebak, N.E., Richardson, D.W., Darling, J.A.B., Hunter, W.M., Jørgensen, M., Nielsen, A., Ingerslev, O., Keiding, N. & Müller, J. (1986). Onset of the release of spermatozoa (spermarche) in boys in relation to age, testicular growth, pubic hair and height. *J.Clin.Endocrinol.Metab.* **62**, 532-535.
41. Keiding, N. & Væth, M. (1986). Calculating expected mortality. *Statist. in Medicine* **5**, 327-334.
42. Secher, N.J., Hansen, P.K., Thomsen, B.L. & Keiding, N. (1987). Growth retardation in preterm infants. *Br.J.Obstetr.Gynaec.* **94**, 115-120.
43. a. Keiding, N. (1987). The method of expected number of deaths 1786-1886-1986. *Int.Statist.Rev.* **55**, 1-20.  
b. Keiding, N. (1988). El método del número esperado de muertes 1786-1886-1986. *Revista de Estadística*, **2**, 45-63.
44. Jacobsen, N., Keiding, N., Ryder, L., Ringdén, O., Lönnqvist, B., Gahrton, G., Rajantie, J., Siimes, M., Volin, L., Ruutu, T., Nikoskelainen, J., Toivvanen, A. & Andersen, H.K. (1987). Graft-versus-leukemia activity associated with cytomegalovirus antibody positive bone marrow donors in acute myeloid leukaemia. *Lancet i*, 456-457.

45. Secher, N.J., Djursing, H., Hansen, P.K., Lenstrup, C., Eriksen, P.S., Thomsen, B.L. & Keiding, N. (1987). Estimation of fetal weight in the third trimester by ultrasound. *Eur.J.Obstet.Gynecol.Reprod.Biol.* **24**, 1-11.
46. Jacobsen, N., Lönnqvist, B., Ringdén, O., Rajantie, J., Siimes, M.A., Volin, L., Ruutu, T., Nikoskelainen, J., Toivanen, A., Ryder, L., Andersen, H.K., Keiding, N. & Gahrton, G. (1987). Graft-versus-leukaemia activity associated with cytomegalovirus seropositive bone marrow donors but separated from graft-versus-host disease in allograft recipients with AML. *Eur.J.Haematol.* **38**, 350-355.
47. Keiding, N., Bayer, T. & Watt-Boolsen, S. (1987). Confirmatory analysis of survival data using left truncation of the life times of primary survivors. *Statist. in Medicine* **6**, 939-944.
48. Iversen, L., Andersen, O., Andersen, P.K., Christoffersen, K. & Keiding, N. (1987). Unemployment and mortality in Denmark, 1970-80. *Brit.Med.J.* **295**, 879-884.
49. Thorpe, S.M., Rose, C., Rasmussen, B.B., Mouridsen, H.T., Bayer, T. & Keiding, N. (1987). Prognostic value of steroid hormone receptors: Multivariate analysis of systemically untreated patients with node negative primary breast cancer. *Cancer Research* **47**, 6126-6133.
50. Rank, F., Dombernowsky, P., Jespersen, N.C.B., Pedersen, B.V. & Keiding, N. (1987). Histological malignancy grading of invasive ductal breast carcinomas. A regression analysis of prognostic factors in low-risk carcinomas from a multicenter trial. *Cancer* **60**, 1299-1305.
51. Secher, N.J., Hansen, P.K., Lenstrup, C., Eriksen, P.S., Thomsen, B.L. & Keiding, N. (1987). On the evaluation of routine ultrasound screening in the third trimester for detection of light for gestational age (LGA) infants. *Acta Obstet.Gynecol.Scand.* **66**, 463-471.
52. Andersen, L. & Keiding, N. (1988). Size distribution of neurosecretory granules in the supraoptic nucleus and the neurohypophysis of waterloaded, normal and waterdeprived rats. *Acta Anatomica* **132**, 89-95.
53. Andersen, P.K., Borgan, Ø., Gill, R. & Keiding, N. (1988). Censoring, truncation and filtering in statistical models based on counting processes. *Contemporary Mathematics* **80**, 19-60.
54. Keiding, N. & Andersen, P.K. (1989). Nonparametric estimation of transition intensities and transition probabilities: a case study of a two-state Markov Process. *Appl.Statist.* **38**, 319-329.
55. Watt-Boolsen, S., Ottesen, G., Andersen, J.A., Bayer, T., Jespersen, N.C.B., Keiding, N., Mouridsen, H.T., Dombernowsky, P. & Blichert-Toft, M. (1989). Significance of incisional biopsy in breast carcinoma: results from a clinical trial with intended excisional biopsy. *Europ.J.Surg.Oncol.* **15**, 33-37.
56. Keiding, N., Holst, C. & Green, A. (1989). Retrospective estimation of diabetes incidence from information in a current prevalent population and historical mortality. *Amer.J.Epid.* **130**, 588-600.
57. Klein, J.P., Keiding, N. & Kamby, C. (1989). Semiparametric Marshall-Olkin models applied to the occurrence of metastases at multiple sites after breast cancer. *Biometrics* **45**, 1073-1086.

58. Keiding, S., Ericzon, B.-G., Eriksson, S., Flatmark, A., Höckerstedt, K., Isoniemi, H., Karlberg, I., Keiding, N., Olsson, R., Samela, K., Schrupf, E. & Söderman, C. (1990). Survival after liver transplantation of patients with PBC in the Nordic countries: Comparison to expected survival from another series of transplantations and from an international trial of medical treatment. *Scand.J.Gastroenterol.* **25**, 11-18.
59. Keiding, N., Andersen, P.K. & Frederiksen, K. (1990). Modelling excess mortality of the unemployed: Choice of scale and extra-Poisson variability. *Appl.Statist.*, **39**, 63-74.
60. Keiding, N. & Gill, R.D. (1990). Random truncation models and Markov processes. *Ann.Statist.* **18**, 582-602.
61. Krasnik, A., Fouchard, J.R., Bayer, T. & Keiding, N. (1990). Health workers and AIDS: knowledge, attitudes and experiences as determinants of anxiety. *Scand.J.Soc.Med.* **18**, 103-113.
62. Andersen, L. & Keiding, N. (1990). Size of the fibrillar centres of the nucleoli in the supraoptic nucleus of the rat taking the Swiss cheese effect into account. *Acta Anat.*, **138**, 348-351.
63. Keiding, N. (1990). Statistical inference in the Lexis diagram. *Phil.Trans.Roy.Soc.Lond.A.*, **332**, 487-509.
64. Jacobsen, N., Badsberg, J.H., Lönnqvist, B., Ringdén, O., Volin, L., Rajantie, J., Nikoskelainen, J. & Keiding, N. for the Nordic Bone Marrow Transplantation Group (1990). Graft-versus-leukemia activity associated with CMV-seropositive donor, posttransplant CMV infection, young donor age and chronic graft-versus-host disease in bone marrow allograft recipients. *Bone Marrow Transplantation*, **5**, 413-418.
65. Werdelin, L. & Keiding, N. (1990). Hereditary ataxias and associated disorders. Epidemiological aspects. *Neuroepidemiology* **9**, 321-331.
66. Somnier, F.E., Keiding, N. & Paulson, O.B. (1991). Epidemiology of myasthenia gravis in Denmark. A longitudinal and comprehensive population survey. *Arch.Neurol.* **48**, 733-739.
67. Jørgensen, M., Keiding, N. & Skakkebæk, N.E. (1991). Estimation of spermarche from longitudinal spermaturia data. *Biometrics* **47**, 177-193.
68. Thomsen, B.L., Keiding, N. & Altman, D.G. (1991). A note on the comparison of observed and expected survival, illustrated by the survival of liver transplant patients. *Statist. in Medicine* **10**, 733-738. Reply to Letter to the Editor: Vol. **11**, 1992, 1528-1530.
69. Dirksen, A., Rasmussen, F.V. & Keiding, N. (1991). Choice of measurement and sample size for detection of changes in lung function in obstructive pulmonary disease. *Eur.Respir.Rev.* **1**, 432-435.
70. Andersen, P.K., Hansen, L.S. & Keiding, N. (1991). Non- and semi-parametric estimation of transition probabilities from censored observation of a non-homogeneous Markov process. *Scand.J.Statist.* **18**, 153-167.
71. Andersen, P.K., Hansen, L.S. & Keiding, N. (1991). Assessing the influence of reversible disease indicators on survival. *Statist. in Medicine* **10**, 1061-1067.

72. Keiding, N. (1991). Age-specific incidence and prevalence: a statistical perspective (with discussion). *J.Roy.Statist.Soc. A* **154**, 371-412.
73. Bisgård, C., Sloth, H., Keiding, N. & Juel, K. (1991). Excess mortality in giant cell arteritis. *J.Int.Med.* **230**, 119-123.
74. a. Zedeler, K., Keiding, N. & Kamby, C. (1992). Differential influence of prognostic factors on the occurrence of metastases at various anatomical sites in human breast cancer. *Statist. in Medicine* **11**, 281-294.  
b. Zedeler, K., Keiding, N. & Kamby, C. (1994). Prognostiske faktorerers indflydelse på forekomsten af metastaser i forskellige lokalisationer ved cancer mammae. *Ugeskr.Læg.* **156**, 42-47.
75. Keiding, N. & Andersen, L. (1992). Estimation of the size distribution of fibrillar centres in nucleoli - an example of the 'Swiss cheese' problem in stereology. *Biometrics* **48**, 449-458. Correction *Biometrics* **52**, 1164 .
76. a. Carlsen, E., Giwercman, A., Keiding, N. & Skakkebak, N.E. (1992). Evidence for decreasing quality of semen during past 50 years. *Brit.Med.J.* **305**, 609-613.  
b. Carlsen, E., Giwercman, A., Keiding, N. & Skakkebak, N.E. (1993). Faldende sædkvalitet fra 1930-1991. *Ugeskr.Læg.* **155**, 2530-2535.
77. Pedersen, J.L., Nysom, K., Jørgensen, M., Nielsen, C.T., Müller, J., Keiding, N. & Skakkebak, N.E. (1993). Spermaturia and puberty. *Arch.Dis.Childhood* **69**, 384-387.
78. Olivarius, N. de F., Andreasen, A.H., Keiding, N. & Mogensen, C.E. (1993). Epidemiology of renal involvement in newly-diagnosed middle-aged and elderly diabetic patients. Cross-sectional data from the population-based study "Diabetes care in general practice", Denmark. *Diabetologia* **36**, 1007-1016.
79. Klein, J.P., Keiding, N. & Copelan, E.A. (1993). Plotting summary predictions in multistate survival models: Probabilities of relapse and death in remission for bone marrow transplantation patients. *Statist. in Medicine* **12**, 2315-2332.
80. Keiding, S., Badsberg, J.H., Becker, U., Bentsen, K.D., Bonnevie, O., Caballeria, J., Eriksen, J., Hardt, F., Keiding, N., Morgan, M., Poulsen, H., Ranek, L., Rodés, J., Schou, G., Walker, R. & Tygstrup, N. (1994). The prognosis of patients with alcoholic liver disease. An international randomized, placebo-controlled trial on the effect of malotilate on survival. *J. Hepatology* **20**, 454-460.
81. Heitmann, B.L., Sørensen, T.I.A., Keiding, N. & Skakkebak, N.E. (1994). Prediction of adult height of short children. *Br.Med.J.* **308**, 1207.
82. Nysom, K., Pedersen, J.L., Jørgensen, M., Nielsen, C.T., Müller, J., Keiding, N. & Skakkebak, N.E. (1994). Spermaturia in two normal boys without other signs of puberty. *Acta Paediatrica* **83**, 520-521.
83. Klein, J.P., Keiding, N. & Kreiner, S. (1995). Graphical models for panel studies, illustrated on data from the Framingham heart study. *Statist. in Medicine* **14**, 1265-1290.
84. Keiding, N. (1995). Historical controls and modern survival analysis. *Lifetime Data Analysis* **1**, 19-25.

85. Jacobsen, M. & Keiding, N. (1995). Coarsening at random in general sample spaces and random censoring in continuous time. *Ann.Statist.* **23**, 774-786.
86. Keiding, N., Begtrup, K., Scheike, T.H. & Hasibeder, G. (1996). Estimation from current-status data in continuous time. *Lifetime Data Analysis* **2**, 119-129.
87. Schou, S., Holmstrup, P., Keiding, N. & Fiehn, N.-E. (1996). Microbiology of ligature-induced marginal inflammation around osseointegrated implants and ankylosed teeth in cynomolgus monkeys (*Macaca fascicularis*). *Clinical Oral Implants Research* **7**, 190-200.
88. Toppari, J., Larsen, J.C., Christiansen, P., Giwercman, A., Grandjean, P., Guillette, L.J., Jégou, B., Jensen, T.K., Jouannet, P., Keiding, N., Leffers, H., McLachlan, J.A., Meyer, O., Müller, J., Meyts, E.R.-D., Scheike, T., Sharpe, R., Sumpter, J., Skakkebæk, N.E. (1996). Male reproductive health and environmental chemicals with estrogenic effects. *Environ. Health Perspect.* **104**, (Suppl. 4), 741-803.
89. Møller, S., Becker, U., Juul, A., Skakkebæk, N.E., Christensen, E. and the EMALD Group [N. Keiding member of the EMALD Group] (1996). Prognostic value of insulinlike growth factor I and its binding protein in patients with alcohol-induced liver disease. *Hepatology* **23**, 1073-1078.
90. Keiding, N., Andersen, P.K. & Klein, J.P. (1997). The role of frailty models and accelerated failure time models in describing heterogeneity due to omitted covariates. *Statist. in Medicine* **16**, 215-224.
91. Martinussen, T. & Keiding, N. (1997). The Manton-Woodbury model for longitudinal data with dropouts. *Statist. in Medicine* **16**, 273-283.
92. Jørgensen, N., Auger, J., Giwercman, A., Irvine, D.S., Jensen, T.K., Jouannet, P., Keiding, N., le Bon, C., MacDonald, E., Pekuri, A.-M., Scheike, T.H., Simonsen, M., Suominen, J. & Skakkebæk N.E. (1997). Semen analysis performed by different laboratory teams: an intervariation study. *Int. J. Androl.* **20**, 201-208.
93. Heitmann, B.L., Svendsen, O.L., Martinussen, T., Mikkelsen, K.L., Keiding, N., Sørensen, T.I.A. & Astrup, A.V. (1997). Den sundhedsmæssige betydning af tilsigtet vægttab. *Ugeskr. Læg.* **159**, 4099-4104.
94. Sundberg, K., Bang, J., Smidt-Jensen, S., Brocks, V., Lundsteen, C., Parner, J., Keiding, N. & Philip, J. (1997). Randomised study of risk of fetal loss related to early amniocentesis versus chorionic villus sampling. *Lancet* **350**, 697-703.
95. Krasnik, A., Hansen, E., Keiding, N. & Sawitz, A. (1997). Determinants of general practice utilization in Denmark. *Dan. Med. Bull.* **44**, 556-560.
96. Keiding, N., Andersen, C. & Fledelius, P. (1998). The Cox regression model for claims data in non-life insurance. *ASTIN Bulletin* **28**, 95-118.
97. Prescott, E., Osler, M., Hein, H.O., Borch-Johnsen, K., Lange, P., Schnohr, P., Vestbo, J. and The Copenhagen Center for Prospective Population Studies [N. Keiding, member of Steering Group of The Copenhagen Center for Prospective Population Studies] (1998). Gender and smoking-related risk of lung cancer. *Epidemiology* **9**, 79-83.

98. Andersen, L., Kayser, L., Keiding, N. & Thomsen, J. (1998). A morphometric analysis of nucleoli in cultured carcinoma cells of the human thyroid. *Anal. Cell. Pathol.* **16**, 131-140.
99. Madsen, A.L., Keiding, N., Karle, A., Esbjerg, S. & Hemmingsen, R. (1998). Neuroleptics in progressive structural brain abnormalities in psychiatric illness. *Lancet* **352**, 784-785.
100. Andersen, L.B., Vestbo, J., Juel, K., Bjerg A.M., Keiding, N., Jensen, G., Hein, H.O. & Sørensen, T.I.A. (1998). A comparison of mortality rates in three prospective studies from Copenhagen with mortality rates in the central part of the city, and the entire country. *Eur.J.Epid.* **14**, 579-585.
101. Bonde, J.P.E., Jensen, T.K., Larsen, S.B., Abell, A., Scheike, T., Hjollund, N.H.I., Kolstad, H.I., Ernst, E., Giwercman, A., Skakkebæk, N.E., Keiding, N. & Olsen, J. (1998). Year of birth and sperm count in ten Danish occupational studies. *Scand.J.Work, Env., Health* **24**, 407-413.
102. Keiding, N. (1999). Event history analysis and inference from observational epidemiology. *Statist.Med.* **18**, 2353-2363.
103. Keiding, N., Filiberti, M., Esbjerg S., Robins, J.M. & Jacobsen, N. (1999). The graft versus leukemia effect after bone marrow transplantation: A case study using structural nested failure time models. *Biometrics* **55**, 23-28.
104. Esbjerg, S., Keiding, N. & Koch-Henriksen, N. (1999). Reporting delay and corrected incidence of multiple sclerosis. *Statist.Med.* **18**, 1691-1706.
105. Grandjean, P., Budtz-Jørgensen, E., White, R.F., Jørgensen, P.J., Weihe, P., Debes, F. & Keiding, N. (1999). Methylmercury exposure markers as indicators of neurotoxicity in 7-year-old children. *Amer.J.Epidemiol.* **150**, 301-305.
106. Gyllenborg, J., Skakkebæk, N.E., Nielsen, N.C., Keiding, N. & Giwercman, A. (1999). Secular and seasonal changes in semen quality among young Danish men: a statistical analysis of semen samples from 1927 donor candidates during 1977-1995. *Int.J.Androl.* **22**, 28-36.
107. Hjerl, K., Andersen, E.W., Keiding, N., Sawitz, A., Olsen, J.H., Mortensen, P.B. & Jørgensen, T. (1999). Breast cancer risk among women with psychiatric admission with affective or neurotic disorders: a nationwide cohort study in Denmark. *Br.J.Cancer* **81**, 907-911.
108. Mikkelsen, K.L., Heitmann, B.L., Keiding, N., Sørensen, T.I.A. (1999). Independent effects of stable and changing body weight on total mortality. *Epidemiology* **10**, 671-678.
109. Mauer, D.K., Nolan, J., Sitter, H., Plaisance, P., Benoit, H., Stiell, I.A., Vei-Apostoleris, V., Keiding, N., Lurie, K.G. & The ACD-CPR Study Group. (1999). Effect of active compression-decompression resuscitation (ACD-CPR) on survival: a combined analysis using individual patient data. *Resuscitation* **41**, 249-256.
110. Jensen, T.K., Scheike, T., Keiding, N., Schaumburg, I. & Grandjean, P. (1999). Fecundability in relation to body mass and menstrual cycle patterns. *Epidemiology* **10**, 422-428.
111. Ogata, Y., Katsura, K., Keiding, N., Holst, C. & Green, A. (2000). Empirical Bayes age-period-cohort analysis of retrospective incidence data. *Scand.J.Statist.* **27**, 415-432.

112. Andersen, A.G., Jensen, T.K., Carlsen, E., Jørgensen, N., Andersson, A.M., Krarup, T., Keiding N. & Skakkebaek, N.E. (2000). High frequency of sub-optimal semen quality among young men of the general Danish population. *Human Reproduction* **15**, 366-372.
113. Budtz-Jørgensen, E., Grandjean, P., Keiding, N., White, R.F. & Weihe, P. (2000). Benchmark dose calculations of methylmercury-associated neurobehavioural deficits. *Toxicology Letters* **112-113**, 193-199.
114. Jensen, T.K., Scheike, T., Keiding, N., Schaumburg, I. & Grandjean, P. (2000). Selection bias in determining the age dependence of waiting time to pregnancy. *Am.J.Epidemiol.* **152**, 565-572.
115. Klein, J.P., Keiding, N., Shu, Y., Szydlo, R.M. & Goldman, J.M. (2000). Summary curves for patients transplanted for chronic myeloid leukemia salvaged by a donor lymphocyte infusion: The current leukemia free survival curve. *Br.J.Haematol.* **109**, 148-152.
116. Juul, S., Keiding, N. & Tvede, M. (2000). Retrospectively sampled time-to-pregnancy data may make age-decreasing fecundity look increasing. *Epidemiology* **11**, 717-719.
117. Keiding, N., Klein, J.P. & Horowitz, M.M. (2001). Multistate models and outcome prediction in bone marrow transplantation. *Statist.Med.* **20**, 1871-1885.
118. Parner, E.T. & Keiding, N. (2001). Misspecified proportional hazard models and confirmatory analysis of survival data. *Biometrika* **88**, 459-468.
119. Jørgensen, N., Andersen, A.-G., Eustache, F., Irvine, D.S., Suominen, J., Petersen, J.H., Andersen, A.N., Auger, J., Cawood, E.H.H., Horte, A., Jensen, T.K., Jouannet, P., Keiding, N., Vierula, M., Toppari, J. & Skakkebaek, N.E. (2001). Regional differences in semen quality in Europe. *Hum. Reprod.* **16**, 1012-1019.
120. Budtz-Jørgensen, E., Keiding, N. & Grandjean, P. (2001). Benchmark dose calculation from epidemiological data. *Biometrics* **57**, 698-706.
121. Rønningen, K.S., Keiding, N. & Green, A. on behalf of Genomic Marker Contributors and the EURODIAB ACE Study Group (2001). Correlations between the incidence of childhood onset Type 1 diabetes in Europe and HLA genotypes. *Diabetologia* **44**, Supp. **3**, B51-B59.
122. Grandjean, P., Weihe, P., Burse, V.W., Needham, L.L., Storr-Hansen, E., Heinzow, B., Debes, F., Murata, K., Simonsen, H., Ellefsen, P., Budtz-Jørgensen, E., Keiding, N. & White, R.F. (2001). Neurobehavioral deficits associated with PCB in 7-year-old children prenatally exposed to seafood neurotoxicants. *Neurotoxicology and Teratology* **23**, 305-317.
123. Schiøttz-Christensen, B., Lyngberg, K., Keiding, N., Ebling, A.H., Danneskiold-Samsøe, B. & Bartels, E.B. (2001). Use of isokinetic muscle strength as a measure of the severity of rheumatoid arthritis. *Clinical Reumatology* **20**, 423-427.
124. Klein, J.P., Rizzo, J.D., Zhang, M.-J. & Keiding, N. (2001). Statistical methods for the analysis and presentation of the results of bone marrow transplants. Part I: Unadjusted analysis. *Bone Marrow Transplantation* **28**, 909-915.
125. Klein, J.P., Rizzo, J.D., Zhang, M.-J. & Keiding, N. (2001). Statistical methods for the analysis and presentation of the results of bone marrow transplants. Part II: Regression modelling. *Bone Marrow Transplantation* **28**, 1001-1011.

126. Jensen, T.K., Slama, R., Ducot, B., Suominen, J., Cawood, E.H.H. Andersen, A.G., Eustache, F., Irvine, S., Auger, S., Jouannet, P., Vierula, M., Jørgensen, N., Toppari, J., Skakkebæk, N.E., Keiding, N. & Spira, A. (2001). Regional differences in waiting time to pregnancy among couples from four European cities. *Human Reproduction* **16**, 2697-2704.
127. Krasnik, A., Norredam, M., Sorensen, T.M., Michaelsen, J.J., Nielsen, A.S. & Keiding, N. (2002). Effect of ethnic background on Danish hospital utilisation patterns. *Soc. Sci. Med.* **55**, 1207-1211.
128. Jacobsen, R., Keiding, N. & Lynge, E. (2002). Long term mortality trends behind low life expectancy of Danish women. *J. Epidemiol. Comm. Health* **56**, 205-208.
129. Slama, R., Eustache, F., Ducot, B., Jensen, T.K., Jørgensen, N., Horte, A., Irvine, S., Suominen, J., Andersen, A.-G., Auger, J., Vierula, M., Toppari, J., Andersen, A.N., Keiding, N., Skakkebæk, N.E., Spira, A. & Jouannet, P. (2002). Time to pregnancy and semen parameters: a cross sectional study among fertile couples from four European cities. *Human Reproduction* **17**, 503-515.
130. Hjerl, K., Andersen, E.W., Keiding, N., Mortensen, P.B. & Jørgensen, T. (2002). Increased incidence of affective disorders, anxiety disorders, and non-natural mortality in women after breast cancer diagnosis: a nation-wide cohort study in Denmark. *Acta Psychiatrica Scand.* **105**, 258-264.
131. Mol, N.M., Sørensen, N., Weihe, P., Andersson, A.-M., Jørgensen, N., Skakkebæk, N.E., Keiding, N. & Grandjean, P. (2002). Spermaturia and serum hormone concentrations at puberty age in boys prenatally exposed to polychlorinated biphenyls. *Eur.J.Endocrinol.* **146**, 357-363.
132. Andersen, P.K. and Keiding, N. (2002). Multi-state models for event history analysis. *Statist. Meth.Med.Res.* **11**, 91-115.
133. Thomsen, L.L, Eriksen, M.K., Romer, S.F., Andersen, I., Østergaard, E., Keiding, N., Olesen, J. & Russell, M.B. (2002). An epidemiological survey of hemiplegic migraine. *Cephalalgia* **22**, 361-375.
134. Keiding, N., Kvist, K., Hartvig, H., Tvede, M. & Juul, S. (2002). Estimating time to pregnancy from current durations in a cross-sectional sample. *Biostatistics* **3**, 565-578.
135. Jensen, T.K., Carlsen, E., Jørgensen, N., Berthelsen, J.G., Keiding, N., Christensen, K., Petersen, J.H., Knudsen, L.B. & Skakkebæk, N.E. (2002). Poor semen quality may contribute to recent decline in fertility rates. *Human Reproduction* **17**, 1437-1440.
136. Budtz-Jørgensen, E., Keiding, N., Grandjean, P. & Weihe, P. (2002). Estimation of health effects of prenatal mercury exposure using structural equation models. *Environ. Health* **1**, 2.
137. Vass, M., Avlund, K., Hendriksen, C., Andersen, C.K. and Keiding, N. (2002). Preventive home visits to older people in Denmark: Methodology of a randomized controlled study. *Aging Clin. Exp. Res.* **14**, 509-515.
138. Budtz-Jørgensen, E., Keiding, N., Grandjean, P., Weihe, P. and White, R.F. (2003). Statistical methods for the evaluation of health effects of prenatal mercury exposure. *Environmetrics* **14**, 105-120.

139. Hjerl, K., Andersen, E.W., Keiding, N., Mouridsen, H.T., Mortensen, P.B. & Jørgensen, T. (2003). Depression as a prognostic factor for breast cancer mortality. *Psychosomatics* **44**, 24-30.
140. Weihe, P., Debes, F., White, R.F., Sørensen, N., Budtz-Jørgensen, E. and Keiding, N. (2003). Miljøepidemiologisk forskning fører til sænkning af grænseværdien for kviksølv. *Ugeskr. Læg.* **165**, 107-111.
141. Lamarca, R. Ferrer, M., Andersen, P.K., Liestøl, K., Keiding, N. & Alonso, J. (2003). A changing relationship between disability and survival in the elderly population: differences by age. *J.Clin. Epidemiol.* **56**, 1192-1201. Erratum Vol. **57**, 324 (2004).
142. a. Løkkegaard, E., Pedersen, A.T., Heitmann, B.L., Jovanovic, Z., Keiding, N., Hundrup, Y.A., Obel, E.B. & Ottesen, B. (2003). Relation between hormone replacement therapy and ischaemic heart disease in women: prospective observational study. *BMJ* **326**, 426-430.  
b. Løkkegaard, E.C.L., Pedersen, A.T., Heitmann, B.L., Jovanovic, Z., Keiding, N., Hundrup, Y.A., Obel, E.B. & Ottesen, B.S. (2004). Relationen mellem postmenopausal hormonsubstitution og iskæmisk hjertesygdom baseret på en dansk prospektiv kohorte. *Ugeskrift for Læger* **166**, 1892-1894.
143. Budtz-Jørgensen, E., Keiding, N., Grandjean, P., Weihe, P. and White, R.F. (2003). Consequences of exposure measurement error for confounder identification in environmental epidemiology. *Statist. Med.* **22**, 3089-3100.
144. Schmiegelow, K., Björk, O., Glomstein, A., Gustafsson, G., Keiding, N., Kristinsson, J., Mäkipernaa, A., Rosthøj, S., Szumlanski, C., Sørensen, T.M. & Weinshilboum, R. (2003). Intensification of mercaptopurine/methotrexate maintenance chemotherapy may increase the risk of relapse for some children with acute lymphoblastic leukemia. *J. Clin. Oncol.* **21**, 1332-1339.
145. Løkkegaard, E., Jovanovic, Z., Heitmann, B.L., Keiding, N., Ottesen, B., Hundrup, Y.A., Obel, E.B. & Pedersen, A.T. (2003). Increased risk of stroke in hypertensive women using hormone therapy. Analyses based on the Danish Nurse Study. *Arch. Neurol.* **60**, 1379-1384.
146. Keiding, N. & Budtz-Jørgensen, E. (2003). The precautionary principle and statistical approaches to uncertainty. *Eur. J. Oncol. Library* **2**, 185-191. Republished in *Int. J. Occ. Med. Env. Health* (2004), **17**, 147-151. Republished in *Hum.Ecol. Risk Assessment* (2005), **11**, 201-207.
147. Grandjean, P., Budtz-Jørgensen, E., Keiding, N. & Weihe, P. (2003). Underestimation of risk due to exposure misclassification. *Eur. J. Oncol. Library* **2**, 165-172. Republished in *Int. J. Occ. Med. Env. Health* (2004), **17**, 131-136.
148. Nørredam, M., Krasnik, A., Sorensen, T.M., Keiding, N., Michaelsen, J.J. & Nielsen, A.S. (2004). Emergency room utilisation in Copenhagen: a comparison of immigrant groups and Danish-born residents. *Scand. J. Pub. Health* **32**, 53-59.
149. Budtz-Jørgensen, E., Grandjean, P., Jørgensen, P.J., Weihe, P. & Keiding, N. (2004). Association between mercury concentrations in blood and hair in methylmercury-exposed subjects at different ages. *Env. Res.* **95**, 385-393. Corrigendum Vol. **102**, 249, 2006.
150. Stahlberg, C., Pedersen, A.T., Lynge, E., Andersen, Z.J., Keiding, N., Hundrup, Y.A., Obel, E.B. & Ottesen, B. (2004). Increased risk of breast cancer following different regimens of hormone replacement therapy frequently used in Europe. *Int. J. Cancer* **109**, 721-727.

151. Slama, R., Kold-Jensen, T., Scheike, T., Ducot, B., Spira, A. & Keiding, N. (2004). How would a decline in sperm concentration over time influence the probability of pregnancy? *Epidemiology* **15**, 458-465.
152. Jacobsen, R., von Euler, M., Osler, M., Lynge, E. & Keiding, N. (2004). Women's death in Scandinavia – what makes Denmark different? *Eur. J. Epid.* **19**, 117-121.
153. Jensen, T.K., Jørgensen, N., Punab, M., Haugen, T.B., Suominen, J., Zilaitiene, B., Horte, A., Andersen, A.-G., Carlsen, E., Magnus, Ø., Matulevicius, V., Nermoen, I., Vierula, M., Keiding, N., Toppari, J. & Skakkebaek, N.E. (2004). Association of in utero exposure to maternal smoking with reduced semen quality and testis size in adulthood: A cross-sectional study of 1,770 young men from the general population in five European countries. *Amer. J. Epid.* **159**, 49-58.
154. Vass, M., Avlund, K., Kvist, K., Hendriksen, C., Andersen, C.K. and Keiding, N. (2004). Structured home visits to older people. Are they only of benefit for women? A randomised controlled trial. *Scand. J. Prim. Health Care* **22**, 106-111.
155. Budtz-Jørgensen, E., Keiding, N. and Grandjean, P. (2004). Effects of exposure imprecision for estimation of the benchmark dose. *Risk Analysis* **24**, 1689-1696.
156. Stahlberg, C., Pedersen, A.T., Jovanovic, Z., Keiding, N., Hundrup, Y.A., Obel, E.B., Møller, S., Rank, F., Ottesen, B. & Lynge, E. (2004). Breast cancer with different prognostic characteristics developing in Danish women using hormone replacement therapy. *Br. J. Cancer* **91**, 644-650.
157. Rosthøj, S. & Keiding, N. (2004). Explained variation and predictive accuracy in general parametric statistical models: The role of model misspecification. *Lifetime Data Analysis* **10**, 461-472. (Reprinted as B45.)
158. Ditlevsen, S., Christensen, U., Lynch, J., Damsgaard, M.T. & Keiding, N. (2005). The mediation proportion: A structural equation approach for estimating the proportion of exposure effect on outcome explained by an intermediate variable. *Epidemiology* **16**, 114-120. (See also G 45).
159. a. Henderson, R. & Keiding, N. (2005). Forudsigtelse af individuelle levetider ved hjælp af statistiske modeller. *Ugeskrift for Læger* **167**, 1174-1177. Correction p. 2069.  
b. Henderson, R. & Keiding, N. (2005). Individual survival time prediction using statistical models. *J. Medical Ethics* **31**, 703-706.
160. Keiding, N. (2005). Kan vi løfte arven efter Westergaard? *Dansk Sociologi* **16**, 117-125.
161. Joffe, M., Key, J., Best, N., Keiding, N., Scheike, T. & Jensen, T.K. (2005). Studying time to pregnancy using a retrospective design. *Am. J. Epid.* **162**, 115-124.
162. Thygesen, L.C., Knudsen, L.B. & Keiding, N. (2005). Modelling regional variation of first-time births in Denmark 1980-1994 by an age-period-cohort model. *Demographic Research* **13**, 573-596.
163. Stahlberg, C., Lynge, E., Jovanovic, Z., Keiding, N., Ottesen, B., Rank, F., Møller, S., Hundrup, Y.A., Obel, E.B. & Pedersen, A.T. (2005). Breast cancer morbidity and mortality in Danish women using hormone replacement therapy – prospective observational study. *Int. J. Epid.* **34**, 931-935.

164. Scheike, T. & Keiding, N. (2006). Design and analysis of time to pregnancy. *Stat. Meth. Med. Res.* **15**, 127-140.
165. Løkkegaard, E., Jovanovic, Z., Heitmann, B.L., Keiding, N., Ottesen, B. & Pedersen, A.T. (2006). The association between early menopause and risk of ischemic heart disease. Influence of hormone therapy. *Maturitas* **53**, 226-233.
166. Holstein, B.E., Avlund, K., Martinussen, T., Due, P. & Keiding, N. (2006). The measurement of change in functional ability: dealing with attrition and the floor/ceiling effect. *Arch. Geront. Geriat.* **43**, 337-350.
167. Slama, R., Ducot, B., Carstensen, L., Lorente, C., de La Rochebrochard, E., Leridon, H., Keiding, N. & Bouyer, J. (2006). Feasibility of the current duration approach to study human fecundity. *Epidemiology* **17**, 440-449.
168. Jacobsen, R., Keiding N. & Lynge E. (2006). Causes of death behind low life expectancy of Danish women. *Scand. J. Publ. Health* **34**, 432-436.
169. Keiding, N. (2006). Event history analysis and the cross-section. *Statist. Med.* **25**, 2343-2364.
170. Budtz-Jørgensen, E., Keiding, N., Grandjean, P. & Weihe, P. (2007). Confounder identification in environmental epidemiology: Assessment of health effects of prenatal mercury exposure. *Ann. Epidemiol.* **17**, 27-35.
171. Avlund, K., Vass, M., Kvist, K., Hendriksen, C. & Keiding, N. (2007). Educational intervention toward preventive home visitors reduced functional decline in community-living older women. *J. Clin. Epidemiol.* **60**, 954-962.
172. Gerster, M., Keiding, N., Knudsen, L.B. & Strandberg-Larsen, K. (2007). Education and second birth rates in Denmark 1981-1994. *Demogr. Res.* **17**, 181-210.
173. Thygesen, L.C., Keiding, N., Johansen, C. & Grønbaek, M. (2007). Changes in alcohol intake and risk of upper digestive tract cancer. *Acta Oncol.* **46**, 1085-1089.
174. Norredam, M., Krasnik, A., Pipper, C. & Keiding, N. (2007). Cancer incidences among 1st generation migrants compared to native Danes – A retrospective cohort study. *Eur. J. Cancer* **43**, 2717-2721.
175. Gerster, M. & Keiding, N. (2008). Biological and sociological interpretations of age-adjustment in studies of higher order birth rates. *Demogr. Res.* **19**, 1205-1216.
176. Norredam, M., Krasnik, A., Pipper, C. & Keiding, N. (2008). Differences in stage of disease between migrant women and native Danish women diagnosed with cancer: results from a population based cohort study. *Eur. J. Cancer Prev.* **17**, 185-190.
177. Scheike, T., Rylander, L., Carstensen, L., Keiding, N., Jensen, T.K., Strömberg, U., Joffe, M. & Akre, O. (2008). Time trends in human fecundability in Sweden. *Epidemiology* **19**, 191-196.
178. Nielsen, L.H., Løkkegaard, E., Andreasen, A.H. & Keiding, N. (2008). Using prescription registries to define continuous drug use: how to fill gaps between prescriptions. *Pharmacoepidemiology and Drug Safety* **17**, 384-388.

179. Kolte, I.V., Skinhøj, P., Keiding, N. & Lynge, E. (2008). The Spanish flu in Denmark. *Scand.J.Infect.Dis.* **40**, 538-546.
180. Thygesen, L.C., Johansen, C., Keiding, N., Giovannucci, E. & Grønbæk, M. (2008). Effects of sample attrition in a longitudinal study of the association between alcohol intake and all-cause mortality. *Addiction* **103**, 1149-1159.
181. Thygesen, L.C., Mørch, L.S., Grønbæk, M., Johansen, C. & Keiding, N. (2008). Use of baseline and updated information of alcohol intake on risk for breast cancer: importance of latency. *Int.J.Epid.* **37**, 669-677.
182. Hansen, M.-L.H., Mølgaard-Nielsen, D., Knudsen, L.B. & Keiding, N. (2009). Rates of induced abortion in Denmark according to age, previous births and previous abortions. *Demogr. Res.* **21**, 647-680.
183. Key, J., Joffe, M., Best, N., Jensen, T.K. & Keiding, N. (2009). Methodological issues in analyzing time trends in biologic fertility: Protection bias. *Amer.J.Epid.* **169**, 285-293.
184. Nielsen, L.H., Løkkegaard, E., Andreasen, A.H., Hundrup, Y.A. & Keiding, N. (2009). Estimating the effect of current, previous and never use of drugs in studies based on prescription registries. *Pharmacoepidemiology Drug Safety* **18**, 147-153.
185. Joffe, M., Key, J., Best, N., Jensen, T.K. & Keiding, N. (2009). The role of biological fertility in predicting family size. *Human Reproduction* **24**, 1999-2006.
186. Norredam, M., Garcia-Lopez, A., Keiding, N. & Krasnik, A. (2009). Risk of mental disorders in refugees and native Danes: a register-based retrospective cohort study. *Soc.Psychiat.Epid.* **44**, 1023-1029.
187. Aalen, O.O., Andersen, P.K., Borgan, Ø., Gill, R.D., Keiding, N. (2009). History of applications of martingales in survival analysis. *Electr. J. Hist. Prob. Statist.* **5** (1), 1-28.
188. Norredam, M., Garcia-Lopez, A., Keiding, N. & Krasnik, A. (2010). Excess use of coercive measures among migrants compared with native Danes. *Acta Psychiatr. Scand.* **121**, 143-151.
189. Larsen, K.S., Thygesen, L.C., Knudsen, L.B. & Keiding, N. Modelling second-time birth rates and the birth interval between the first and second child in Denmark from 1980 to 1994 by an age-period-cohort model. *Scandinavian Population Studies*. (to appear).
190. Nielsen, L.H. & Keiding, N. Validation of methods for identifying treatment discontinuation from prescription data. *Appl. Statist.* (to appear).
191. Hvidtfeldt, U.A., Gerster, M., Knudsen, L.B. & Keiding, N. Are trends in Danish fertility rates explained by changes in timing of births? *Scand. J. Publ. Health* (to appear).

Papers submitted for publication and still under review are listed in Sections E and H.

**B. Research papers published as book chapters or as reports.**

1. Keiding, N. (1975). Estimation theory for branching processes. *Bull.Int.Statist.Inst.* **46** (4), 12-19.
2. Keiding, N. (1976). Population growth and branching processes in random environments. *Proc. 9 Int.Biom.Conf.Inv.Papers II*, 149-165.
3. Christensen, I., Hartmann, N.R., Keiding, N., Larsen, J.K., Noer, H. & Vindeløv, L. (1978). Statistical analysis of DNA distributions from cell populations with partial synchrony. *Proc. 3 Int.symp.Pulsecytometry*, 71-78.
4. Dion, J.-P. & Keiding, N. (1978). Statistical inference in branching processes. In: *Branching Processes* (eds. A. Joffe & P. Ney), *Advances in Probability* **5**, New York: Dekker, 105-140.
5. Keiding, N., Andersen, K.W., Andersen, J., Brincker, H., Mouridsen, H.T. and other members of DBCG (1982). Danish Breast Cancer Cooperative Group. In: *Clinical Trials in Early Breast Cancer* (eds. M. Baum, R. Kay & H. Scheurlen). Basel: Birkhäuser, 591-599.
6. Møller, U. & Keiding, N. (1983). Circadian dependent toxicity of methotrexate. In: *Psoriasis: Cell Proliferation* (eds. N.A. Wright & R.S. Camplejohn). Edinburgh: Churchill Livingstone, 385-392.
7. Keiding, N., Hartmann, N.R. & Møller, U. (1984). Diurnal variation in influx and transition intensities in the S phase of hamster cheek pouch epithelium cells. In: *Cell Cycle Clocks* (ed. L.N. Edmunds) New York: Dekker, 135-159.
8. Keiding, N. & Andersen, P.K. (1985). Samtidig inddragelse af flere forklarende variable; modeller for den tilfældige variation. Kapitel 6 i O. Andersen: *Dødelighed og erhverv 1970-80*. Statistiske Undersøgelser nr. 41. København : Danmarks Statistik.
9. Jørgensen, M., Nielsen, C.T., Keiding, N. & Skakkebæk, N.E. (1985). Parametrische und nichtparametrische modelle für Wachstumsdaten. In: *Neuere Verfahren der nichtparametrischen Statistik* (Hrg. G.C. Pflug), Springer Series, Medizinische Informatik und Statistik **60**, 74-87, 1985. (English version available as: Parametric and non-parametric models applied to growth data. Research Report 85/3, Statistical Research Unit, University of Copenhagen).
10. Keiding, N. (1986). Statistical analysis of semi-Markov processes based on the theory of counting processes. In: *Semi-Markov models. Theory and Applications* (ed. J. Janssen) New York: Plenum, 301-315.
11. Nielsen, C.T., Skakkebæk, N.E., Darling, J.A.B., Hunter, W.M., Richardson, D.W., Jørgensen, M. & Keiding, N. (1986). Longitudinal study of testosterone and luteinizing hormone (LH) in relation to spermathe, pubic hair, height and sitting height in normal boys. *Acta Endocrinol., Suppl.* **279**, 98-106.

12. Jacobsen, N., Badsberg, J.H., Lönnqvist, B., Ringdén, O., Volin, L., Ruutu, T., Rajantie, J., Siimes, M.A., Nikoskelainen, J., Toivanen, A., Andersen, H.K., Keiding, N. & Gahrton, G. for the Nordic Bone Marrow Transplantation Group (1987). Predictive factors for chronic graft-versus-host disease and leukaemic relapse after allogeneic bone marrow transplantation. In: *Recent advances and future directions in bone marrow transplantation* (eds. S.J. Baum, G.W. Santon, F. Takaku) New York: Springer, 161-164.
13. Keiding, N., Hansen, B.E. & Holst, C. (1990). Nonparametric estimation of disease incidence from a cross-sectional sample of a stationary population. In: *Stochastic Processes in Epidemic Theory* (eds. J.-P. Gabriel, C. Lefèvre, P. Picard), Springer Lecture Notes in Biomathematics **86**, 36-45.
14. Höckerstedt, K., Ericzon, B.-G., Eriksson, L.S., Flatmark, A., Isoniemi, H., Karlberg, N., Keiding, N., Keiding, S., Olsson, R., Samela, K., Schrumpf, E. & Söderman, C. (1990). Survival after liver transplantation for primary biliary cirrhosis: Use of prognostic indices for comparison with medical treatment. *Transplant.Proc.*, **22**, 1499-1500.
15. Keiding, N. (1992). Independent delayed entry (with discussion). *Survival Analysis: State of the Art*. (eds. J.P. Klein & P.K. Goel). Kluwer, Dordrecht, 309-326.
16. Keiding, N. (1993). Modern survival analysis methods in infectious disease epidemiology. In: *Mathematics applied to biology and medicine*. (eds. J. Demongeot & V. Capasso). Winnipeg: Wuerz, 205-215.
17. Keiding, N. (1993). Correction for measurement error. *Eur.J.Clin.Nutr.* **47**, Suppl. 2, S31-S33.
18. Petersen, J. H. & Keiding, N. (1993). Concepts from statistical modelling of fertility data, with an illustration on the association between education and fertility of primiparous women. Appendix V to Knudsen, L.B. *Fertility Trends in Denmark in the 1980s*. Statistiske Undersøgelser nr. 44. Copenhagen: Danmarks Statistik, 147-164.
19. Giwercman, A., Carlsen, E., Keiding, N. & Skakkebak, N.E. (1993). Evidence for increasing incidence of abnormalities of the human testis: A review. *Env. Health Persp. Suppl.* **101** (Suppl. 2), 65-71.
20. BGA Commission on Nutritional Epidemiology (1993). Recommendations for the design and analysis of nutritional epidemiologic studies with measurement errors in the exposure variables. *Eur.J.Clin.Nutr.* **47**, Suppl. 2, S53-S57. (N. Keiding, member of Commission).
21. Keiding, N. (1994). Delayed entry, the prevalent cohort study, and survival synthesis. Proc.conf. on Statistical Inference and Biostatistics, CIMAT, Guanajuato, Mexico, 22-26 March 1993 (ed. D. Sprott), 215-225.
22. Keiding, N. (1994). Medical statistics: An example from diabetes epidemiology. First European Congress of Mathematics. Paris, July 6-10, 1992. Volume III: Round Tables (eds. A. Joseph, F. Mignot, F. Murat, B. Prum & R. Rentschler), 517-519.
23. Keiding, N. (1995). Recent applications of survival analysis in epidemiology. *Bull.Int.Statist.Inst.* **56**, 1323-1333.

24. Carlsen, E., Giwercman, A., Keiding, N. & Skakkebaek, N.E. (1995). Declining semen quality and increasing incidence of testicular cancer: Is there a common cause? *Environ. Health Perspect.* **103** (Suppl. 7), 137-139.
25. Jensen, T.K., Toppari, J., Keiding, N. & Skakkebaek, N.E. (1995). Do environmental estrogens contribute to the decline in male reproductive health? *Clin. Chem.* **41**, 1896-1901.
26. Toppari, J., Larsen, J.C., Christiansen, P., Giwercman, A., Grandjean, P., Guillette, L.J., Jégou, B., Jensen, T.K., Jouannet, P., Keiding, N., Leffers, H., McLachlan, J.A., Meyer, O., Müller, J., Meyts, E.R.-D., Scheike, T., Sharpe, R., Sumpter, J., Skakkebaek, N.E. (1995). Mandlig reproduktion og kemiske stoffer med østrogenlignende effekter. Miljøprojekt nr. 292, Miljøstyrelsen (abbreviated Danish version of A88.).
27. Keiding, N. (1996). Historical controls and modern survival analysis. In: *Lifetime Data: Models in Reliability and Survival Analysis* (eds. N.P. Jewell, A.C. Kimber, M.-L.T. Lee & G.A. Whitmore), Kluwer, Dordrecht, 157-165, (republication of A84).
28. Andersen, P.K. & Keiding, N. (1996). Survival analysis. In: *Advances in Biometry: 50 years of the International Biometric Society* (eds. P. Armitage & H.A. David), Wiley, New York, 177-199.
29. Keiding, N. (1996). Assessing effects of age, period and cohort on human sperm concentration. In: *Liber Amicorum Roel van Strik*, Rotterdam, 45-48.
30. European workshop on the impact of endocrine disrupters on human health and wildlife. (1997). Report of Proceedings 2-4 December 1996. Weybridge, UK (N. Keiding, member of Editorial Board).
31. Heitmann, B.L., Svendsen, O.L., Martinussen, T., Mikkelsen, K.L., Keiding, N., Lissner, L., Sørensen, T.I.A. & Astrup, A. (1997). Den sundhedsmæssige betydning af tilsigtet vægttab. Ernæringsrådet, København.
32. Keiding, N. (1998). Selection effects and nonproportional hazards in survival models and models for repeated events. *Proc XIXth International Biometric Conference, Cape Town, Invited Papers*, 241-250.
33. Keiding, N. (1998) The counting process approach to event history analysis and survival synthesis. *Proc ESAIM [electronic journal]* (to appear).
34. Keiding, N. (1999). Decline of semen quality during the last 50 years and possible links with environmental chemicals. In: *Statistics for Environment 4* (eds. V. Barnett, K. Turkman and A. Stein). Chichester, Wiley, 193-208.
35. Keiding, N. (1999). Analysis of time-to-pregnancy data. *Scand. J. Work Env. Health* **25** suppl. 1, 10-11.
36. Budtz-Jørgensen, E., Keiding, N. & Grandjean, P. (1999). Benchmark modeling of the Faroese methylmercury data. *Final Report to U.S.EPA*, 15 pp. Also available as Research Report 99/5, Department of Biostatistics, University of Copenhagen.
37. Keiding, N. (2001). Event history analysis: overview. *Proc. 16. Int. Workshop. Statist. Model.* (eds. B. Klein & L. Korsholm), Odense, 43-50.

38. Jørgensen, N., Jensen, T.K., Andersson, A.-M., Carlsen, E., Petersen, J.H., Keiding, N. & Skakkebak, N.E. (2001). Undersøgelse af sædkvaliteten hos unge, danske mænd fra normalbefolkningen. 1. rapport. *Afd. for Vækst og Reproduktion, Rigshospitalet*.
39. Keiding, N. (2002). Two nonstandard examples of the classical stratification approach to graphically assessing proportionality of hazards. In: *Goodness-of-fit Tests and Model Validity* (eds. C. Huber-Carol, N. Balakrishnan, M.S. Nikulin and M. Mesbah). Boston, Birkhäuser, 301-308.
40. Jørgensen, N., Jensen, T.K., Andersson, A.-M., Carlsen, E., Petersen, J.H., Keiding, N. & Skakkebak, N.E. (2003). Undersøgelse af sædkvaliteten hos unge, danske mænd fra normalbefolkningen. 2. rapport. *Afd. for Vækst og Reproduktion, Rigshospitalet*.
41. Budtz-Jørgensen E., Keiding N. & Grandjean, P. (2003). Application of structural equation models for evaluating epidemiological data and for calculation of the benchmark dose. In: *The ISI International Conference on Environmental Statistics and Health* (eds. J. Mateu, D. Holland, W. González-Manteiga), Universidade de Santiago de Compostela, 183-194.
42. An international review of UK research in mathematics. (2004). A review undertaken on behalf of the Engineering and Physical Sciences Research Council (EPSRC) and the Council for the Mathematical Sciences (CMS). (N. Keiding, member of review group).
43. Jørgensen, N., Jensen, T.K., Andersson, A.-M., Carlsen, E., Asklund, C., Petersen, J.H., Keiding, N. & Skakkebak, N.E. (2004). Undersøgelse af sædkvaliteten hos unge, danske mænd fra normalbefolkningen. 3. rapport. *Afd. for Vækst og Reproduktion, Rigshospitalet*.
44. Jørgensen, N., Jensen, T.K., Andersson, A.-M., Asklund, C., Carlsen, E., Petersen, J.H., Keiding, N. & Skakkebak, N.E. (2005). Undersøgelse af sædkvaliteten hos unge, danske mænd fra normalbefolkningen. 4. rapport. *Afd. for Vækst og Reproduktion, Rigshospitalet*.
45. Rosthøj, S. & Keiding, N. (2006). Explained variation and predictive accuracy in general parametric statistical models: The role of model misspecification. In: *Probability, Statistics and Modelling in Public Health* (eds. M. Nikulin, D. Commenges, C. Huber). Springer, New York, 392-404. (Reprint of A157).
46. Kreiner, S. & Keiding, N. (2006). Om analyse af gentagne kategoriserede målinger. Kapitel 9 i: *Forskel og lighed i sundhed og sygdom* (red. S. Vallgård & L. Koch). Munksgaard, København, 123-143.
47. Gerds, T.A., Qvist, V., Strub, J.R., Phipps, C.B., Scheike, T.H., Keiding, N. (2009). Failure time analysis. In: *Statistical and Methodological Aspects of Oral Health Research* (eds. E. Lesaffre, J. Feine, B. Leroux, D. Declerck). John Wiley & Sons, Ltd., 259-277.
48. Budtz-Jørgensen, E., Keiding, N. & Grandjean, P. (2009). Approaches to handling uncertainty when setting environmental exposure standards. In: *Uncertainties in Environmental Modelling and Consequences for Policy Making* (eds. P. Baveye, J. Mysiak, M. Laba). Springer, pp. 267-280.
49. Keiding, N. (2010). Har fagfællebedømmelse stadig en chance? Erfaringer fra Research Assessment Exercise. In: *Hvad er forskning?* (ed. C. Emmeche and J.Faye). Frederiksberg: Nyt fra Samfundsvidenskaberne, Kapitel 10, pp. 219-235.

### C. Books.

1. Keiding, N. (1973). Lecture notes on the stochastic population model. Institute of Mathematical Statistics, University of Copenhagen, 75 pp.
2. Jacobsen, M. & Keiding, N. (1976). Markovkæder. Institut for Matematisk Statistik, Københavns Universitet, 174 pp. 2. udgave 1982: 192 pp. 3. udgave 1986: 192 pp.
3. Andersen, P.K., Borgan, Ø., Gill, R.D. & Keiding, N. (1993). *Statistical Models Based on Counting Processes*. New York: Springer, 767 pp.
4. Andersen, P.K. & Keiding, N. (ed.) (2006). *Survival and Event History Analysis*. Chichester: Wiley.

### D. Invited discussion contributions, editorials, scholarly commentaries, book reviews, encyclopedia articles.

1. Beyer, J.E. & Keiding, N. (1975). Remarks on the paper, A stochastic bivariate ecology model for competing species, by Chris P. Tsokos and Sidney W. Hinkley. *Math.Biosc.* **24**, 351-352.
2. Keiding, N. (1975). Contribution to the discussion of B. Efron: Defining the curvature of a statistical problem (with applications to second order efficiency). *Ann.Statist.* **3**, 1228-1231.
3. Keiding, N. (1976). Review of P. Jagers: Branching processes with biological applications. *Scand.Act.J.* **1976**, 118-119.
4. Keiding, N. (1976). Contribution to the discussion of J.M. Hoem: The statistical theory of demographic rates: A review of current developments. *Scand.J.Statist.* **3**, 179-180.
5. Keiding, N. (1981). Contribution to the discussion of D. Oakes: Survival times: Aspects of partial likelihood. *Intern.Statist.Rev.* **49**, 262.
6. Hilden, J., Keiding, N., Christensen, E., Juhl, E. & Tygstrup, N. (1983). Negative randomiserede kliniske undersøgelser og fortolkningen af sikkerhedsintervaller. *Ugeskr.Læg.* **145**, 2443-2445.
7. Keiding, N., Hilden, J., Arnfred, T. & Væth, M. (1984). Ikke-parametriske sikkerhedsintervaller. *Ugeskr.Læg.* **146**, 275-276.
8. Keiding, N. (1985). Anmeldelse (book review) af Andersen, B., Holm, P. Problems with p. Significance testing in medical research. *Ugeskr.Læg* **147**, 1422.
9. Keiding, N. (1985). Bayesiansk analyse af kontrollerede behandlingsforsøg. *Ugeskr.Læg.* **147**, 2315.
10. Keiding, N. (1985). Discussion of N. Lenoir: Statistics and individual liberties. Pp. 60-61 in: *Protection of privacy, automatic data processing and progress in statistical documentation*. Eurostat News - Special Edition. Luxembourg.
11. Keiding, N. (1986). Læseren og statistikken (editorial). *Ugeskr.Læg.* **148**, 1038.

12. Keiding, N. (1986). Discussion of D.R. Brillinger: The natural variability of vital rates and associated statistics. *Biometrics* **42**, 721-724.
13. Keiding, N. (1987). Matchning som *confounder*kontrol. *Ugeskr.Læg.* **149**, 946.
14. Keiding, N. (1987). Discussion of C.R. Muirhead and S.C. Darby: Modelling the relative and absolute risks of radiation-induced cancers. *J.Roy.Statist.Soc. A* **150**, 108-109.
15. Keiding, N. (1988). Truncation, Non-parametric estimation under. In: *Encyclopedia of Statistical Sciences*, **9**, (eds. S. Kotz & N.L. Johnson) New York: Wiley, 357-359.
16. Keiding, N. (1988). Beregning af det forventede antal døde. *Ugeskr.Læg.* **150**, 173.
17. Keiding, N. (1988). The development of biostatistics and medical statistics. *Svenska Statistikersamfundets jubileumskonferens i Umeå den 7-9 oktober 1987* (eds. G. Kulldorff & H. Stenlund), Umeå, 139-144.
18. Keiding, N. (1989). Woodrooffe's inversion formula. In: *Encyclopedia of Statistical Sciences*, suppl. Vol (ed. S. Kotz & N.L. Johnson) New York: Wiley, 197-198.
19. Keiding, N. (1989). Discussion of E. Arjas: Survival models and martingale dynamics. *Scand.J.Statist.* **16**, 209-213.
20. Becker, N.G. & Keiding, N. (1989). Review of "Short-term prediction of HIV infection and AIDS in England and Wales: Report of a Working Group". *Statist. in Medicine* **8**, 1553-1556.
21. Keiding, N. (1990). Review of A. Ahlbom: Biostatistik för epidemiologer. (in Danish). *Ugeskr. Læg.* **152**, 1759.
22. Keiding, N. (1990). Sikkerhedsintervaller [Confidence intervals] (editorial). *Ugeskr.Læg.* **152**, 2622.
23. Keiding, N. (1990). Review of M.J. Gardner & D.G. Altman (eds.): Statistics with confidence - confidence intervals and statistical guidelines and M.J. Gardner et al.: Confidence interval analysis (CIA). Microcomputer program and manual. *Ugeskr.Læg.* **152**, 2661-2662.
24. Keiding, N. (1991). Meta-analyser: nogle tekniske bemærkninger. *Ugeskr.Læg.* **153**, 1947-1948.
25. Kreiner, S. & Keiding, N. (1992). Discussion of "Quality-of-life Assessment: Can We keep It Simple?" by Cox, D.R. et al. *J.Roy.Statist.Soc. A* **155**, 385.
26. Keiding, N. (1993). Review of A. Stuart & J.K. Ord "Kendall's Advanced Theory of Statistics, 2: Classical Inference and Relationship, 5th ed." *Biometrics* **49**, 955-956.
27. Keiding, N. (1993). Discussion of Invited Paper Meeting 26: "Statistical and computational problems in drug surveillance and health monitoring". *Bull.Internat.Statist.Inst.* **55** (4), 176-177.
28. Keiding, N. (1994). Introduction to discussion of the relation between statistical inference and biostatistics. Proc. Conf. on Statistical Inference and Biostatistics, CIMAT, Guanajuato, Mexico, March 22-26, 1993 (ed. D. Sprott), 251-254.

29. Keiding, N. (1994). Discussion of D.J. Spiegelhalter, L.S. Freedman & M.K.B. Parmar "Bayesian approaches to clinical trials". *J.Roy.Statist.Soc. A* **157**, 395.
30. Keiding, N., Giwercman, A., Carlsen, E. & Skakkebak, N.E. (1994). Commentary: Importance of empirical evidence. *Br.Med.J.* **309**, 22.
31. Skakkebak, N.E. & Keiding, N. (1994). Changes in semen and the testis (editorial). *Br.Med.J.* **309**, 1316-1317.
32. Keiding, N. (1995). Biometrika. *Den Store Danske Encyklopædi* **3**, 33.
33. Keiding, N. (1995). Biostatistik. *Den Store Danske Encyklopædi* **3**, 36.
34. Keiding, N. (1995). Discussion of Invited Paper Meeting 30: Epidemic modelling and its relation to data. *Bull.Internat.Statist.Inst.* **56**, 1736-1737.
35. Keiding, N. (1995). Discussion of D.R. Cox "The relation between theory and practice in statistics" *Test* **4**, 241-242.
36. Keiding, N. (1996). Censurering. *Den Store Danske Encyklopædi* **4**, 97.
37. Keiding, N. & Højgaard, L. (1996). Forskningsmetodologisk og statistisk konsulenttjeneste (editorial). *Ugeskr. Læg.* **158**, 7373.
38. Keiding, N. (1998). Counting Processes. In: *Encyclopedia of Statistical Sciences Update* **2**, 159-166.
39. Keiding, N. (1998). Delayed entry. *Encycl. Biostat.* **2**, 1120-1125. Reprinted in *Encycl. Biostat., Second edition*, **2**, 1404-1409 (2005).
40. Keiding, N. (1998). Ghosts. *Encycl. Biostat.* **2**, 1719-1720. Reprinted in *Encycl. Biostat., Second edition*, **3**, 2188 (2005).
41. Keiding, N. (1998). Grenander estimators. *Encycl. Biostat.* **2**, 1780-1781. Reprinted in *Encycl. Biostat., Second edition*, **3**, 2255-2256 (2005).
42. Keiding, N. (1998). Historical controls in survival analysis. *Encycl. Biostat.* **3**, 1927-1931. Reprinted in *Encycl. Biostat., Second edition*, **4**, 2442-2443 (2005).
43. Keiding, N. (1998). Incidence-prevalence relationships. *Encycl. Biostat.* **3**, 2004-2007. Reprinted in *Encycl.Epid.Method.* (ed. M. Gail & J. Benichou). Chichester: Wiley, 433-437 (2000). Reprinted in *Biostatistical Genetics and Genetical Epidemiology* (ed. R.C. Elston, J.M. Olson, L. Palmer). Chichester: Wiley, 406-409 (2002). Reprinted in *Encycl. Biostat., Second edition*, **4**, 2502-2506 (2005).
44. Keiding, N. (1998). Lexis diagram, statistical models for. *Encycl. Biostat.* **3**, 2232-2234. Reprinted as Lexis diagram. *Encycl.Epid.Method.* (ed. M. Gail & J. Benichou). Chichester: Wiley, 473-476 (2000). Reprinted in *Encycl. Biostat., Second edition*, **4**, 2767-2769 (2005).
45. Keiding, N. (1998). Logrank test. *Encycl. Biostat.* **3**, 2351. Reprinted in *Encycl. Biostat., Second edition*, **4**, 2905 (2005).

46. Keiding, N. (1998). Time origin, choice of. *Encycl. Biostat.* **6**, 4532-4533. Reprinted in *Encycl. Biostat.*, Second edition, **8**, 5450-5451 (2005).
47. Andersen, P.K. & Keiding, N. (1998). Survival analysis (overview). *Encycl. Biostat.* **6**, 4452-4461. Reprinted in *Encycl.Epid.Method.* (ed. M. Gail & J. Benichou). Chichester: Wiley, 891-900 (2000). Revised version in *Encycl. Biostat.*, Second edition, **8**, 5368-5377 (2005).
48. Andersen, P.K. & Keiding, N. (1998). Total time on test. *Encycl. Biostat.* **6**, 4548-4550. Reprinted in *Encycl. Biostat.*, Second edition, **8**, 5483-5484 (2005).
49. Klein, J.P., Andersen, P.K. & Keiding, N. (1998). Exponential distribution. *Encycl. Biostat.* **2**, 1447-1448. Reprinted in *Encycl. Biostat.*, Second edition, **3**, 1863 (2005).
50. Klein, J.P., Andersen, P.K. & Keiding, N.(1998). Weibull distribution. *Encycl. Biostat.* **6**, 4734-4735. Reprinted in *Encycl. Biostat.*, Second edition, **8**, 5724-5725 (2005).
51. Gill, R. D. & Keiding, N. (1998). Hazard plotting. *Encycl. Biostat.* **3**, 1815-1817.
52. Keiding, N. (1998). Discussion of D.De Angelis, W.R. Gilks & N.E. Day "Bayesian projection of the acquired immune deficiency syndrome epidemic". *Appl.Statist.* **47**, 485.
53. Keiding, N. & Thomsen, B.L. (1999). Expected survival curves, Bonser and Væth estimators of. *Encycl. Statist. Sci. Update* **3**, 228-230.
54. Keiding, N. (1999). Lexis diagram. *Encycl. Statist. Sci. Update* **3**, 411-413.
55. Keiding, N. (1999). Overlevelsmodeller. *Den Store Danske Encyklopædi* **14**, 592.
56. Keiding, N. (1999). Discussion of Invited Paper Meeting 5: Statistics and the assessment of causality. *Bull.Int.Statist.Inst.* **58** (3), 75-76.
57. Keiding, N. (2000). Discussion of P. McCullagh: "Invariance and factorial models". *J.Roy.Statist. Soc. B* **62**, 250.
58. Keiding, N. (2001). Trunkering 4. *Den Store Danske Encyklopædi* **19**, 283.
59. Andersen, P.K. & Keiding, N. (2001). Event history analysis in continuous time. *Internat. Encycl. Social & Behavioral Sciences* (ed. N.J. Smelser & P.B. Baltes) **7**, 4946-4956. Oxford: Elsevier.
60. Keiding, N. (2001). Comments on "Understanding the shape of the hazard rate: A process point of view" by O.O. Aalen and H.K. Gjessing. *Statistical Science* **16**, 19-20.
61. Keiding, N. (2001). Discussion of C.P. Farrington, M.N. Kanaan and N.J. Gay: "Estimation of the basic reproduction number for infectious diseases from age-stratified serological survey data". *Appl. Statist.* **50**, 288.
62. Keiding, N. (2002). Endocrine disruptors. *Encyclopedia of Environmetrics* (ed. A.H. El-Shaarawi & W.W. Piegorsch) **2**, 669-671. Chichester: Wiley.

63. Keiding, N. (2002). Discussion of P.M. Fayers and D.J. Hand: Causal variables, indicator variables and measurement scales: an example from quality of life. *J.Roy. Statist.Soc. A* **165**, 256-257.
64. Løkkegaard, E. & Keiding, N. (2004). Commentary 2 re “Oestrogen-progestin therapy is not cardio-protective in healthy postmenopausal women”. *Evidence-based Healthcare* **8**, 39-40.
65. Andersen, P.K. & Keiding, N. (2005). Event history analysis. *Encycl. Biostat.*, Second edition, **3**, 1788-1799.
66. Keiding, N. (2005). Expected survival curve. *Encycl. Biostat.*, Second edition, **3**, 1832-1835.
67. Keiding, N. (2005). Hazard plotting. *Encycl. Biostat.*, Second edition, **4**, 2312-2313.
68. Keiding, N. (2005). Thiele, Thorvald Nicolai. *Encycl. Biostat.*, Second edition, **8**, 5447-5448.
69. Keiding, N. (2005). Time to pregnancy. *Encycl. Biostat.*, Second edition, **8**, 5460-5462.
70. Keiding, N. (2006). Contribution to discussion: Role of poor semen quality for current infertility and future fertility rates – lessons from the clinic and current population studies. *Int.J.Androl.* **29**, 107.
71. Keiding, N. (2006). Contribution to discussion: Reproductive health problems: genetics vs. environment. *Int.J.Androl.* **29**, 305.
72. Keiding, N. (2006). Review of Thiele: Pioneer in Statistics, by S.L. Lauritzen, Oxford University Press 2002. *Matilde* **26**, 34.
73. Keiding, N. (2006). Discussion (seconding the vote of thanks) of C.P. Farrington & H.J. Whitaker: Semiparametric analysis of case series data. *Appl. Statist.* **55**, 583-584.
74. Grandjean, P. & Keiding, N. (2008). Precautionary Principle. *Encycl. of Quantitative Risk Assessment and Analysis*, Melnick, E. & Everitt, B. (eds.) John Wiley & Sons Ltd, Chichester, UK, 1290-1293.
75. Keiding, N. (2008). Obituary: Anders Hald. 1913-2007. *IMS Bulletin.* **37** (1), 12.
76. Keiding, N. (2008). In Memoriam: Professor Anders Hald. *ISI Newsletter.* **32** (1), 5.
77. Poulsen, H.E., Andersen, J.T., Keiding, N., Schramm, T.K., Sørensen, R., Gisslasson, G., Fosbøl E.L. & Torp-Pedersen, C. (2009). Why epidemiological and clinical intervention studies often give different or diverging results? *IUBMB Life* **61**, 391-393.

#### **E. Technical Reports (not otherwise published).**

1. Brøns, H. & Keiding, N. (1971). Consistency of maximum likelihood estimators in the finite case. Preprint No. 5, *Institute of Mathematical Statistics, University of Copenhagen*. Never Submitted for publication.

2. Keiding, N. & Gill, R.D. (1988). Random truncation models and Markov processes. Report MS-R8817, Centre for Mathematics and Computer Science, Amsterdam. Reduced version: *Ann.Statist.* **18**, 582-602, 1990 (A 60).
3. Keiding, N., Somnier, F.E. & Werdelin, L. (1989). Estimating age-specific prevalence from incidence studies: two case studies in neuroepidemiology. *Research Report 89/6, Department of Biostatistics, University of Copenhagen.*
4. Hindsberger, C., Rønn, B., Sejr, T., Andersen, T.F. & Keiding, N. (1997). Longitudinal analysis of health status measurements using variance component models. *Research Report 97/12, Department of Biostatistics, University of Copenhagen.*
5. Keiding, N. (1997). Statistical themes in infectious disease epidemiology. *Research Report 97/16, Department of Biostatistics, University of Copenhagen.*
6. Parner, J. & Keiding, N. (1998). Time-dependent treatment initiation and informative right-censoring. *Research Report 98/13, Department of Biostatistics, University of Copenhagen.*
7. Klein, J.P., Keiding, N. & Horowitz, M.M. (1999). Using a multi-state statistical model to investigate the graft-versus-leukemia effect in bone marrow transplants. *Technical Report 35, Division of Biostatistics, Medical College of Wisconsin.*
8. Keiding, N. (2000). Graphical representations in mortality measurement: Knapp, Zeuner, Becker, Lexis. *Research Report 00/8, Department of Biostatistics, University of Copenhagen.*
9. Utikal, K.J., Parner, J.T. & Keiding, N. (2003). A marginal approach to assessing the effect of an intermediate event. *Research Report 03/1, Department of Biostatistics, University of Copenhagen.*
10. Rosthøj, S. & Keiding, N. (2003). Explained variation and predictive accuracy with an extension to the competing risks model. *Research Report 03/14, Department of Biostatistics, University of Copenhagen.* (Partly published as A 158).
11. Kamper-Jørgensen, M., Keiding, N. & Knudsen, L.B. (2004). Age, period and cohort effects on first-child fertility in Danish men. *Research Report 04/6, Department of Biostatistics, University of Copenhagen.*
12. Keiding, N., Fine, J.P., Carstensen, L. & Slama, R. (2005). Accelerated failure time regression for backward recurrence times and current durations. *Research Report 05/4, Department of Biostatistics, University of Copenhagen.* Revised version: Preprint 2005-86, Institute for Mathematical Sciences, National University of Singapore, <http://www.ims.nus.edu.sg/preprints/2005-86.pdf>
13. Gerds, T.A., Qvist, V., Strub, J.R. & Keiding, N. (2008). Survival analysis in dental research: The typical observational patterns. *Research Report 08/5, Department of Biostatistics, University of Copenhagen.*
14. Frydman, H., Gerds, T., Groen, R., Keiding, N. (2008). Nonparametric estimation in an “illness-death” model when the transition times are interval-censored and one transition is not observed. *Research Report 08/13, Department of Biostatistics, University of Copenhagen.*

15. Didelez, V., Kreiner, S., Keiding, N. (2008). On the use of graphical models for inference under outcome dependent sampling. *Research Report 08/14, Department of Biostatistics, University of Copenhagen.*
16. Nielsen, L.H., Løkkegaard, E. & Keiding, N. (2009). Importance of effect measures in the evaluation of the effect of postmenopausal hormone therapy on myocardial infarction. *Research Report 09/4, Department of Biostatistics, University of Copenhagen.*
17. Gerster, M., Ejrnæs, M. & Keiding, N. (2009). The effect of educational attainment on ultimate fertility – does feedback play a role? *Research Report 09/8, Department of Biostatistics, University of Copenhagen.*
18. Hansen, M.-L.H., Stage, L., Knudsen, L.B. & Keiding, N. Do induced abortions affect the first birth probability? A national register-based study of Danish women. *Research Report 09/10, Department of Biostatistics, University of Copenhagen.*
19. Gill, R.D. & Keiding, N. Product-limit estimators of the gap time distribution of a renewal process under different sampling patterns. *Research Report 09/11, Department of Biostatistics, University of Copenhagen.*
20. Slama, R., Hansen, O., Bohet, A., Ducot, B., Eijkemans, M., Bottagisi, S., Rosetta, L., Chimènes, A., Thalabard, J.-C., Leridon, H., Keiding, N., Bouyer, J. (2010). L'Observatoire épidémiologique de la Fertilité en France : Un Outil de Description de la Fertilité de la Population Générale et de sa Sensibilité aux Facteurs Environnementaux .  
<http://www.agence-nationale-recherche.fr/documents/uploaded/2009/SEST2005/02slama.pdf>

#### **F. Selected published abstracts, etc.**

1. Hald, A. & Keiding, N. (1970). Asymptotic properties of Bayesian decision rules for two terminal decisions and multiple sampling II. *Ann. Math. Statist.* **41**, 1388.
2. Keiding, N. (1974). Maximum likelihood estimation in the birth-and-death process. *Adv.Appl. Prob.* **6**, 220.
3. Keiding, N. (1978). Statistical inference in branching processes. *Adv.Appl.Prob.* **10**, 266.
4. Keiding, N. (1983). Felkällor och metodproblem. *Arbetsmiljöns inverkan på forplantningsförmåga och fosterutveckling*. Nordisk konferens i Malmö 16-17 november 1982, Stockholm: Arbetskyddsfonden, 16-17.
5. Keiding, N. (1983). Statistical applications of the theory of martingales on point processes. *Stoch.Proc.Appl.* **16**, 8.
6. Keiding, N. (1985). Westergaard and the early development of indirect standardization. *Bull.Internat.Statist.Inst.* (contributed papers) **51**, 457-458.
7. Keiding, N., Holst, C. & Green, A. (1987). Retrospective calculation of diabetes incidence from information in a current prevalent population and historical mortality. *Bull.Internat.Statist.Inst.* (contributed papers) **52**, 225-226.

8. Keiding, N., Andersen, O., Andersen, P.K., Christoffersen, K. & Iversen, L. (1988). Unemployment and mortality in Denmark 1970-80. Nordic Seminar on Empirical Life History Analysis and Panel Studies, Nordisk Statistisk sekretariat, Tekniske rapporter **46**, 305-307.
9. Keiding, N. (1989). Nonparametric estimation of Dietz & Schenzle's transmission potential from current-status data. *Bull.Internat.Statist.Inst.* (contributed papers) **53**, 507-508.
10. Keiding, N. (1989). Introductory remarks to invited session on Epidemiology and Public Health. *Bull.Internat.Statist.Inst.* **53** (4), 83.
11. Keiding, N. (1991). Uses of modern survival analysis in epidemiology (Forum lectures). Abstract Volume, European Meeting of Statisticians, Barcelona.
12. Keiding, N. (1992). Estimation of prevalence from incidence, with applications in neuroepidemiology. *Accomplishments in Cancer Research 1991* (eds. J.G. Fortner & J.E. Rhoads). Philadelphia: Lippincott, pp. 367-369.
13. Jacobsen, M. & Keiding, N. (1993). Random censoring and coarsening at random. *Bull.Internat. Statist.Inst.* (contributed papers) **55** (2), 13-14.
14. Keiding, N. (1994). The martingale approach to time-sequential survival analysis. *IMS Bull.* **23**, 460.
15. Keiding, N. (1999). Workshop on randomized trials and alternatives. *DBCG Informationsblad*, **14**, 44-46.
16. Keiding, N. (2001). Age-period-cohort analysis in the 1870s. *Bull.Internat.Statist.Inst.* (contributed papers) **59**, 2, 123-124.
17. Budtz-Jørgensen, E., Keiding, N. & Grandjean, P. (2001). Methodological challenges in assessing neurotoxic effects of prenatal methylmercury exposure and in implementing the information in terms of safety standards. *Internat. Conf. Statist. Chall. Env. Health Probl.*, Fukuoka, 18-23.
18. Keiding, N., Jacobsen, R. & Lynge, E. (2003). Age-period-cohort modeling of the mortality of Danish women. *Bull.Internat.Statist.Inst.* (contributed papers) **54**, 1, 601.
19. Thygesen, L.C., Mørch, L.S., Keiding, N., Johansen, C. & Grønbaek, M. (2006). Influence of baseline and updated information of alcohol intake on risk of breast cancer: the importance of latency time. *Am J Epidemiol* **163** (suppl), S96.
20. Waldemar, G., Waldorff, F.B., Buss, D.V., Eckermann, A., Keiding, N., Rishøj, S., Sørensen, L.V. & Vogel, A. (2006). The Danish Alzheimer intervention study (DAISY): Rationale, design and baseline characteristics. *EFNS European Journal of Neurology* **13** (Suppl. 2), 65.
21. Keiding, N. (2007). Design and analysis of time-to-pregnancy. In: *Proceedings of the 22<sup>nd</sup> International Workshop on Statistical Modelling* (J. del Castillo, A. Espinal & P. Puig (eds.)). Barcelona, July 2-6, 2007.
22. Norredam, M., Krasnik, A., Pipper, C. & Keiding, N. (2007). Differences in stage of disease between migrant women and native Danish women diagnosed with cancer – results from a population-based cohort study. *European Journal of Public Health.* **17**, suppl. 2; 192-193.

23. Nielsen, L.H., Loekkegaard, E.C., Hundrup, Y.A., Keiding, N. (2008). Estimation of the distribution of inter-renewal times of prescriptions during continuous drug use – an approach using cross-sectional validation data. *Pharmacoepidemiology and Drug Safety*. **17**, S137.
24. Keiding, N., Hansen, M.-L. H., Mølgaard-Nielsen, D., Stage, L. & Knudsen, L.B. (2009). Rates of births and induced abortions in Denmark according to age, previous births and previous abortions. *Bull. Internat. Statist. Inst.* (to appear).
25. Gerster, M. & Keiding, N. (2009). Assessing the effect of education on fertility for a cohort of Danish women. *Bull. Internat. Statist. Inst.* (to appear).

### **G. Policy papers, letters to the editor.**

1. Fabricius, J. & Keiding, N. (1980). P-værdier versus sund fornuft. *Ugeskr.Læg.* **142**, 2292.
2. Flensted-Jensen, M. & Keiding, N. (red.) (1981). Forskning og uddannelse i matematikkens anvendelser i andre fagområder. Oplæg til Landsmødet om Matematikken i Danmark, 6.-8. maj 1981, 62 pp.
3. Holm, N.V., Keiding, N., Lynge, E., Olsen, J. & Væth, M. (1981). Short Course on Statistical Methods in Cancer Epidemiology - IARC. Lyon, June 29 - July 3, 1981. *Ugeskr.Læg.* **143**, 2768.
4. Keiding, N. (1981). Statistikerens i arbejdstøjet. *Forskningen og Samfundet*, februar 1981, 11-13.
5. Keiding, N. (1982). Statistisk Forskningsenhed. *Hovedområdet*, februar 1982.
6. Keiding, N. (1983). Statistisk Forskningsenhed. *Ugeskr.Læg.* **145**, 278-279.
7. Keiding, N. (1983). Conference of MRC-statisticians, mathematicians and computer scientists. Cambridge 1982. *Ugeskr.Læg.* **145**, 280-281.
8. Keiding, N. (1985). Overlevelse før og efter hjertetransplantation. *Ugeskr.Læg.* **147**, 427.
9. Østerlind, K. (1986), på vegne også af N. Keiding, L.S. Mortensen, D. Edwards, A. Høskuldsson, G. Schou. Mikrodatamater i lægevidenskabelig forskning: data-registrering og data-administration. *Ugeskr.Læg.* **148**, 3382-3384.
10. UNIC (1987). Mikrodatamater i lægevidenskabelig forskning: dataregistrering og dataadministration. Rapport fra en arbejdsgruppe koordineret af N. Keiding. 2. udg. 112 pp. 3. udg. (1990), 98 pp.
11. Keiding, N. (1988). Variable. *Ugeskr.Læg.* **150**, 39-40.
12. Keiding, N. (1988). Socialforskning afslører opgave-fejl på Bagsiden. *Ingeniøren/job* 8 (26. februar), 34.
13. Keiding, N. & Knuiman, M.W. (1990). Letter to the editor on 'Survival analysis in natural history studies of disease' by A. Cnaan & L. Ryan. *Statist. in Medicine* **9**, 1221-1222.

14. Keiding, N. (1991). Publikation af "negative" undersøgelsesresultater. *Ugeskr.Læg.* **153**, 3027-3028.
15. Keiding, N. (1992). The Biometric Society in the early nineties. *Biom.Bull.* **9** (2), 1-2.
16. Keiding, N. (1993). Goldman, A.I. (1992). "Eventcharts: Visualizing survival and other timed-events data". *Amer.Statist.* **46**, 13-18. Comment by Keiding. *Amer.Statist.* **47**, 84.
17. Keiding, N. (1993). Secretary Roger Mead and Vice-President Richard Tomassone retire. *Biom.Bull.* **10** (1), 1-2.
18. Carlsen, E., Giwercman, A., Skakkebæk, N.E. & Keiding, N. (1993). Decreasing quality of semen (letter). *Brit.Med.J.* **306**, 461.
19. Keiding, N. (fmd.) (1993). *Styrkelse af dansk registerforskning*. Hellerup: Danmarks Grundforskningsfond, 25pp.
20. Keiding, N. (1994). Klaus Hinkelmann retires as Biometrics editor. *Biom.Bull.* **11** (1), **4**.
21. Keiding, N. (1994). Biostatistisk synspunkt på kvaliteten af dansk lægevidenskabelig forskning. *DES orientering* **1** (1), 11-12.
22. Keiding, N., Billard, L. & Tomassone, R. (1994). G.K. Shukla retires as Biometric Bulletin editor. *Biom.Bull.* **11** (2), 1.
23. Keiding, N., Giwercman, A., Carlsen, E. & Skakkebæk, N.E. (1994). Falling sperm quality. *Br.Med.J.* **309**, 131.
24. Keiding, N. & Skakkebæk, N.E. (1995). Authors' reply (to letter to the editor by A. Lerchl). *Br.Med.J.* **311**, 570.
25. Keiding, N. & Skakkebæk, N.E. (1996). Letter to the editor re Olsen et al., *Fertil.Steril.* **63**, 887-892, 1995. *Fertil.Steril.* **65**, 450-451.
26. Keiding, N. & Skakkebæk, N.E. (1996). Rise in semen quality between 1970 and 1990 in meta-analysis was non-significant. *Br.Med.J.* **313**, 44.
27. Keiding, N. (1996). The equilateral Lexis diagram. *Biom.J.* **38**, 892.
28. Keiding, N. (1997). The equilateral Lexis diagram. *Epidemiology* **8**, 220.
29. Keiding, N. (1997). Level curves in Lexis diagrams. *Int.J.Epid.* **26**, 462.
30. Keiding, N. & Skakkebæk, N.E. (1998). No significant increase in sperm count since 1970. *J. Urology* **159**, 2103.
31. Skakkebæk, N.E., Giwercman, A., Jensen, T.K., Carlsen, E., Jørgensen, N. & Keiding, N. (1998). Selection biases in semen study? (Letter to the editor). *Fertil.Steril.* **69**, 1158-1159.
32. Keiding, N. (1999). Letter to the editor on "Age-period-cohort models of chronic disease rates. II: Graphical approaches" by C. Robertson & P. Boyle. *Statist. Medicine* **17**, 1325-1340. *Statist. Medicine* **18**, 1733.

33. Budtz-Jørgensen, E., Keiding, N., Grandjean, P., White, R.F. and Weihe, P. (1999). Methylmercury neurotoxicity independent of PCB exposure. *Environmental Health Perspectives* **107**, A236-A237.
34. Keiding, N. (1999). New editorial structure for Biometrics. *Biometric Bulletin* **16** (3), 3.
35. Jensen, T.K., Keiding, N., Scheike, T., Slama, R. & Spira, A. (2000). Declining human fertility? *Fertil.Steril.* **73**, 421-422.
36. Andersen, A.G., Jørgensen, N., Jensen, T.K., Andersson, A.M., Carlsen, E., Keiding, N., Swan, S.H. & Skakkebaek, N.E. (2000). Serum levels of testosterone do not provide evidence of selection bias in studies of male reproductive health. *Epidemiology* **11**, 232-233.
37. Spang-Thomsen, M., Dabelsteen, E., Holstein-Rathlou, N.-H., Keiding, N. & Nielsen, O.H. (2000). Uddeling af stipendier ultimo 1999 fra Københavns Universitets Sundhedsvidenskabelige Fakultet. *Ugeskr.Læg.* **162**, 3624.
38. Keiding, N. (2000). Report from Editorial Advisory Committee for the period 1998-2000. *Biom. Bull.* **17**, 8-9.
39. Jacobsen, R., Jensen, A., Keiding, N. & Lynge, E. (2001). Queen Margrethe II and mortality in Denmark. *Lancet* **358**, 75.
40. Osler, M., Diderichsen, F., Keiding, N., Prescott, E.I.B. & Frydenberg, M. (2002). Korrelationen mellem prævalensen af skizofrene og den sociodemografiske status i forskellige bydele i Københavns Kommune. *Ugeskrift for Læger* **164**, 3223.
41. Keiding, N., Budtz-Jørgensen E. & Grandjean P. (2003). Prenatal methylmercury exposure in the Seychelles. *Lancet* **362**, 664-665.
42. Keiding, N. (2003). Editorial Advisory Committee [annual report]. *Biom. Bull.* **20** (3), 4.
43. Keiding, N. (2004). "I tilfælde af uoverensstemmelse mellem kort og terræn...". *Matilde* **19**, 14-15.
44. Slama, R., Ducot, B., Keiding, N. & Bouyer, J. (2004). Studying human fertility and environmental exposures. *Environmental Health Perspectives* **112**, 604.
45. Ditlevsen, S., Keiding, N., Christensen, U., Damsgaard, M.T. & Lynch, J. (2005). Mediation proportion. *Epidemiology* **16**, 592. (See A 158)
46. Keiding, N. (2005). Roles of statistics in the life sciences. *International Statistical Review* **73**, 255-258.
47. Keiding, N. (2005). The professional statistician. *International Statistical Review* **73**, 271-272.
48. Hemmingsen, R. & Keiding, N. (2005). Effekt af mammografiscreening for brystkræft. *Ugeskrift for Læger* **167**, 1772-1773.
49. Joffe, M., Key, J., Best, N., Keiding, N. & Jensen, T.K. (2006). Human fertility decline? *Epidemiology* **17**, 238.

50. Thygesen, L.C., Keiding, N. & Grønbaek, M. (2006). Regarding 'Selection and recall bias in a case-control study of lifetime alcohol intake and breast cancer risk'. *Ann. Epidemiol.* **16**, 867-868.
51. Ditlevsen, S. & Keiding, N. (2007). A comment on: Statistical evaluation of biomarkers as surrogate endpoints: a literature review by C.J. Weir and R.J. Walley. *Statist. Medicine* **26**, 1415-1416.
52. Budtz-Jørgensen, E., Keiding, N. & Grandjean, P. (2007). Extreme assumptions are unnecessary. *Epidemiologic Perspectives & Innovations* **4:9**. <http://www.epi-perspectives.com/content/4/1/9>
53. Budtz-Jørgensen, E., Keiding, N. & Grandjean, P. (2007). Rejoinder. *Epidemiologic Perspectives & Innovations* **4:9**. <http://www.epi-perspectives.com/content/4/1/9>
54. Hughes, S. and 34 others (including N. Keiding) (2008). European regulatory agencies should employ full time statisticians. *BMJ* **336**, 250.
55. Keiding, N. (2008) German Mathematical Statistics in the 1860s. *IMS Bulletin* **37**(3), 5.

Also edited Annual Reports from the Statistical Research Unit/Department of Biostatistics since 1978.

#### **H. Papers submitted for publication (but not prepublished as Research Report).**

1. Gerds, T.A., Qvist, V., Strub, J.R. & Keiding, N. Survival analysis in dental research. Part I: Observational pattern and the standard tools.
2. Slama, R., Keiding, N. & Jensen, T.K. Effect of a temporal decline in sperm concentration on fertility and long-term involuntary childlessness.
3. Kolte, I.V., Gerster, M., Skinhøj, P., Keiding, N. & Lyngø, E. Long-term health implications of the Spanish Flu in Denmark.
4. Keiding, N. Event history analysis: Local dependence and cross-sectional sampling .
5. Norredam, M., Garcia-Lopez, A., Keiding, N. & Krasnik, A.. Risk of mental disorders in family reunification migrants and native Danes – a register based retrospective cohort study.