RESUMÉ

Donald A. Pierce

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University of Oklahoma Engineering

Oklahoma State University BS 1961, Engineering

Oklahoma State University MS 1963, Operations Research

Oklahoma State University PhD 1965, Statistics

Johns Hopkins University Postdoc 1966, Operations Research

EMPLOYMENT

1966-96 Statistics Department, Oregon State University

1966-69Assistant Professor1970-77Associate Professor1971-72Acting Chairman

1977-96 Professor

1996-pres. Professor Emeritus

1970-71 Visiting Lecturer, Statistics, University of Kent, England

1971 Visiting Scholar, Statistics, University of London
1979-80 Visiting Professor, Statistics, Stanford University

1981-2004 U.S. Nat'l Acad. Sciences: Radiation Effects Research Foundation, Hiroshima

1981-83 Visiting Scientist, Epidemiology 1986-88 Chief, Department of Statistics

1992-2004 Senior Scientist

2005-2015 Adjunct Professor, Div. of Biostatistics, Dept. of Public Health & Preventive Medicine, Oregon Health & Sciences University, Portland, Oregon http://www.ohsu.edu/xd/education/schools/school-of-medicine/departments/clinical-

departments/public-health/people/pierce.cfm

SELECTED PROFESSIONAL ACTIVITIES/HONORS

1978-82 Editorial Board Member, Communications in Statistics

1979 Council Member, American Statistical Association

1978, 80, 84 Member, NIH Special Study Sections for Statistics Proposals

1979-85	Associate Editor, Annals of Statistics			
1979	Elected Fellow, Institute of Mathematical Statistics			
1981	Elected Fellow, American Statistical Association			
1982-90	Associate Editor, Journal of the American Statistical Association			
1984	Elected Member, International Statistical Institute			
1984-2006	Editor, Oxford University Press Statistical Science Series			
1985-87	Member, National Academy of Sciences Committee on Effects of Ionizing Radiation (BEIR IV)			
1987-89	Member, Board of Directors, American Statistical Association			
1988	Chairman, Committee on Fellows, Institute of Mathematical Statistics			
1990	Member, NCI Advisory Committee, Report on Cancer in Populations Living near Nuclear Facilities			
1990-91	Member, National Academy of Sciences Committee on Occupational Health Effects of Ionizing Radiation among U.S. Nuclear Utility Workers			
1991	Member, EPA Science Advisory Board Subcommittee on Non-ionizing Radiation: Electric and Magnetic Fields			
1991-pres	Associate Editor, Biometrika			
1998-2004	Member, ICRP Task Group on Low-Dose Effects of Ionizing Radiation			
1999-2008	Member, Editorial Board, Radiation and Environmental Biophysics			

PUBLICATIONS of Donald A. Pierce

Pierce, D. A. and Bellio, R. (2016). Modern likelihood-frequentist inference. (Submitted to *International Statistical Review*). Accepted July 2017

Pierce, D. A. and Bellio, R. (2015). Beyond first-order asymptotics for Cox regression. *Bernoulli* 21, 401-419.

Pierce, D. A., Vaeth, M. and Cologne, J. B. (2008). Allowance for random dose-estimation errors in atomic-bomb survivor studies: A revision. *Radiation Research* **170**, 118-126

Pierce, D. A., Vaeth, M. and Shimizu, Y. (2007). Selection bias in cancer risk estimation from Abomb survivors. *Radiation Reserch* **167**, 735-741.

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Asakawa, J., Kuick, R., Kodiara, M., Nakamura, N., Katayama, H., Pierce, D. A., et al. (2004a). A genome scanning approach to assess the genetic effects of radiation in mice and humans. *Radiation Research* **161**, 380-390.

Pierce, D.A. (2003a). Commentary: Mechanistic models for radiation carcinogenesis and the atomic bomb survivor data. *Radiation Research* **160**, 718-723. [Response and reply letters: V. **161**, 369-371].

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Preston, D.L., Pierce, D.A., Shimizu, Y., Ron, E., and Mabuchi, K. (2003c). Dose response and temporal patterns of radiation-associated solid cancer risks. *Health Physics* **85**, 43-46.

Pierce, D.A., Sharp, G.B. and Mabuchi, K. (2003d). Joint effects of radiation and smoking on lung cancer risk among atomic bomb survivors. *Radiation Research* **159**, 511-520.

Pierce, D.A. and Vaeth, M (2003e). Age-time patterns of cancer to be anticipated from exposure to general mutagens. *Biostatistics* **4**, 231-248.

Pierce, D.A. (2002). Age-time patterns of radiogenic cancer risk: their nature and likely explanations. *Journal of Radiological Protection* **22**, A147-A154.

Pierce, D.A. and Preston, D.L. (2000a). Radiation-related cancer risks at low doses among atomic bomb survivors. *Radiation Research* **154**, 178-186.

Chomentowski, M., Kellerer, A.M. and Pierce, D.A. (2000b). Radiation dose dependencies in the Abomb survivor cancer mortality data. *Radiation Research* **153**, 289-294.

Pierce, D.A. and Mendelsohn, M.L. (1999a). A model for radiation-related cancer suggested by the atomic-bomb survivor data. *Radiation Research* **152**, 642-654.

Pierce, D.A. (1999b). On the relation between frequency inference and likelihood. Invited paper, *Proceedings of the 52nd Session of the International Statistical Institute, Helsinki.*

Preston, D.L., Shimizu, Y., Pierce, D.A., Mabuchi, K. (1999c). Cancer and noncancer risks in atomic bomb survivors: Recent results. *Eleventh International Congress of Radiation Research* (eds Moriaraty, M. *et al*). Dublin: International Association for Radiation Research.

Shimizu, Y., Pierce, D.A., Preston, D.L. and Mabuchi, K. (1999d). Studies of the mortality of atomic-bomb survivors. Report 12, Part 2. Non-Cancer Mortality: 1950-1990. *Radiation Research* **152**, 374-389.

Pierce, D.A. and Peters, D. (1999e). Improving on Exact Tests by Approximate Conditioning. *Biometrika* **86** 265-280.

Pierce, D.A. (1998a). Exponential Families. In *Encyclopedia of Biostatistics* (Eds. Armitage and Colton). John Wiley & Sons, New York.

Pierce, D.A. (1998b). Statistical aspects of RERF cancer epidemiology. In *Effects of Ionizing Radiation: Atomic Bomb Survivors and Their Children*. (Eds. Peterson and Abrahamson), 91-100. Joseph Henry Press, Washington D.C.

Mendelsohn, M.L. and Pierce, D.A (1998c). Biomarkers and mechanisms of human radiation carcinogenesis. In *Biomarkers: Medical and Workplace Applications* (Eds. Mendelsohn, Mohr, Peeters) 337-344. Joseph Henry Press, Washington DC.

- Pierce, D.A. (1998d). Cancer and Non-cancer risks among atomic bomb survivors. Invited paper, *Proceedings of the International Conference on Diagnosis and Treatment of Radiation Injury*, Rotterdam (In press).
- Pierce, D.A. and Mendelsohn, M.L. (1998e). A multi-mutation model for cancer based on age-time patterns of radiation effects: 1. Mathematical and epidemiological aspects. 2. Biological aspects. Invited paper, *Proceedings of IAEA/WHO International Conference on Low Doses of Ionizing Radiation: Biological Effects and Regulatory Control*, IAEA, Vienna.
- Preston, D.L., Mabuchi, K., Pierce, D.A., Shimizu, Y. (1997a). Mortality among atomic-bomb survivors, 1950-1990. Invited paper, *Proceedings of the Thirty-Second Annual Meeting of the National Council on Radiation Protection and Measurements, National Council on Radiation Protection and Measurements* (Ed. Boice), 31-39, NCRP, Washington D.C.
- Pierce, D.A. and Preston, D.L. (1997b). Commentary on "No evidence for increased tumor rates below 200 mSv in the atomic bomb survivors data". *Radiat. Environ. Biophys.* **36**, 209-211.
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- Pierce, D.A. and Peters, D. (1994b). Higher-order asymptotics and the likelihood principle: One-parameter models. *Biometrika* **81**, 1-10.
- Barndorff-Nielsen, O.E., Pierce, D.A. and Peters, D. (1994c). Information and nuisance parameter adjustments in higher-order likelihood asymptotics. (unpublished but dealt with in Barndorff-Nielsen and Cox, *Inference and Asymptotics*, Chapman & Hall, 1994).

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Vaeth, M. and Pierce, D.A. (1990b). Calculating excess lifetime risk in relative risk models. *Environmental Health Perspectives* **87**, 83-94.

Shimizu, Y., Kato, H., Schull, W.J., Preston, D.L., Fujita, S., and Pierce, D.A. (1989a). Studies of the mortality of A-bomb survivors: Mortality 195085, Part 1.Comparison of risk coefficients for sitespecific cancer mortality based on the DS86 and T65DR shielded kerma and organ doses. *Radiation Research* **118**, 502-524.

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Tinsley, I.J., Schmitz, J.A. and Pierce, D.A. (1981). Influence of dietary fatty acids on the incidence of mammary tumors in the C3H mouse. *Cancer Research* **41**, 1460-1465.

Mahrt, L. and Pierce, D.A. (1980). Relationship of moist convection to boundary-layer properties: Application to semi-arid region. *Monthly Weather Rev.* **108**, 1810-1815.

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Kopecky, K.J. and Pierce, D.A. (1979b). Efficiency of smooth goodness-of-fit tests. *J. Amer. Statist. Assn.* **74**, 393-397.

Pierce, D.A. and Kopecky, K.J. (1979c). Testing goodness of fit for the distribution of errors in regression models. *Biomerika* **66**, 1-6.

Pierce, D.A., Stewart, W.H. and Kopecky, K.J. (1979). Distribution-free regression analysis of grouped survival data. *Biometrics* **35**, 785-793.

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Pierce, D.A. (1977b). Note on comparison of small proportions in large-scale experiments. *J. Natl. Cancer Inst.* **58**, 1501-1502.

Brunk, H.D. and Pierce, D.A. (1977c). Invited contribution to the discussion of "Consistent nonparametric regression", *Annals of Statist.* **5**, 623-625.

Pierce, D.A. (1975). Invited contribution to the discussion of "Defining the curvature of a statistical problem (with applications to second order efficiency)". *Annals of Statist.* **3**, 1219-1221.

Brunk, H.D. and Pierce, D.A. (1974). Estimation of discrete multivariate densities for computer-aided differential diagnosis of disease. *Biometrika* **61**, 493-499.

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Bogdanoff, D.A. and Pierce, D.A. (1973b). Bayes-fiducial inference for the Weibull distribution. *J. Amer. Statist. Assn.* **68**, 659-664.

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