## **CURRICULUM VITAE**

Name: Gregg E. Dinse

**Citizenship:** United States

#### **Education:**

1976 -- B.S. (Mathematics) magna cum laude, Bucknell University

1978 -- M.S. (Statistical Science) State University of New York at Buffalo

1981 -- Sc.D. (Biostatistics) Harvard University

# **Brief Chronology of Employment:**

1973-1976 Teaching Assistant, Mathematics, Bucknell University 1976-1978 Teaching Assistant, Statistical Science, State University of New York 1978-1981 Research Assistant, Biostatistics, Dana-Farber Cancer Institute 1981-1982 NIH Postdoctoral Fellow, Biostatistics, Harvard University

Staff Fellow, Statistics and Biomathematics Branch, NIEHS, NIH 1982-1985

Senior Staff Fellow, Statistics and Biomathematics Branch, NIEHS, NIH 1985-1987

Senior Investigator, Biostatistics Branch, NIEHS, NIH 1987-Date

## **Honors and Other Special Scientific Recognition:**

Phi Eta Sigma (1973)

Pi Mu Epsilon (1974)

Phi Beta Kappa (1975)

NCI Biometry Traineeship Award (1977, 1979, 1980)

## **Professional Societies:**

Member, American Statistical Association (ASA)

Member, International Biometric Society (IBS/ENAR)

Member, Royal Statistical Society (RSS)

## **Professional Service:**

Member, Regional Advisory Board (IBS/ENAR, 1990-92)

Member, Computer Advisory Board (NIEHS, 1995-99)

Organizer, Invited Sessions for Spring and Summer Joint Statistical Meetings

Referee for: Biometrics, Biometrika, Biostatistics, Journal of the Royal Statistical Society, Journal of the American Statistical Association, Technometrics, Canadian Journal of Statistics, Lifetime Data Analysis, Statistics in Medicine, Risk Analysis, Australian Journal of Statistics, Mathematical Biosciences, Journal of Nonparametric Statistics, Journal of Multivariate Analysis, Statistics and Probability Letters, Communications in Statistics, Journal of Statistical Planning and Inference, Biometrical Journal, Environmental and Ecological Statistics, Journal of the American Medical Association, Cancer Research, Journal of the National Cancer Institute, American Journal of Epidemiology, European Journal of Epidemiology, Annals of Epidemiology, Fundamental and Applied Toxicology, Environmental Health Perspectives, Medical and Pediatric Oncology.

#### **Publications in Peer-Reviewed Journals:**

- 1. **Dinse**, GE and Lagakos, SW: The analysis of partially-censored data from a first-order semi-Markov model. <u>Journal of Statistical Computation and Simulation</u> **11**: 209-222, 1980.
- 2. **Dinse**, GE: Nonparametric estimation for partially-complete time and type of failure data. <u>Biometrics</u> **38**: 417-431, 1982.
- 3. **Dinse**, GE and Lagakos, SW: Nonparametric estimation of lifetime and disease onset distributions from incomplete observations. <u>Biometrics</u> **38**: 921-932, 1982.
- 4. **Dinse**, GE and Lagakos, SW: Regression analysis of tumour prevalence data. <u>Journal of the Royal Statistical Society</u>, <u>Series C</u> **32**: 236-248, 1983. [Corrigenda, Vol. **33**: 79-80, 1984.]
- 5. Baker, EL, Feldman, RG, White, RF, Harley, JP, **Dinse**, GE and Berkey, CS: Monitoring neurotoxins in industry: Development of a neurobehavioral test battery. <u>Journal of Occupational Medicine</u> **25**: 125-130, 1983.
- 6. Baker, EL, Feldman, RG, White, RA, Harley, JP, Niles, CA, **Dinse**, GE and Berkey, CS: Occupational lead neurotoxicity: A behavioral and electrophysiological evaluation -- Study design and year one results. <u>British Journal of Industrial Medicine</u> **41**: 352-361, 1984.
- 7. Bruckner, HW, **Dinse**, GE, Davis, TE, Falkson, G, Creech, RH, Arseneau, JC, Greenspan, EM, Brodovsky, HS, Pagano, M and Hahn, RG: A randomized comparison of cyclophosphamide, adriamycin and 5-fluorouracil with triethylenethiophosphoramide and methotrexate both as sequential and as fixed rotational treatment in patients with advanced ovarian cancer. <u>Cancer</u> **55**: 26-40, 1985.
- 8. Baker, EL, White, RF, Pothier, LJ, Berkey, CS, **Dinse**, GE, Travers, PH, Harley, JP and Feldman, RG: Occupational lead neurotoxicity -- Improvement in behavioral effects after reduction of exposure. <u>British Journal of Industrial Medicine</u> **42**: 507-516, 1985.
- 9. **Dinse**, GE: Testing for a trend in tumor prevalence rates: I. Nonlethal tumors. <u>Biometrics</u> **41**: 751-770, 1985.
- 10. **Dinse**, GE: An alternative to Efron's redistribution-of-mass construction of the Kaplan-Meier estimator. The American Statistician **39**: 299-300, 1985.
- 11. Larson, MG and **Dinse**, GE: A mixture model for the regression analysis of competing risks data. <u>Journal of the Royal Statistical Society</u>, <u>Series C</u> **34**: 201-211, 1985.
- 12. **Dinse**, GE and Haseman, JK: Logistic regression analysis of incidental-tumor data from animal carcinogenicity experiments. <u>Fundamental and Applied Toxicology</u> **6**: 44-52, 1986.
- 13. **Dinse**, GE: Nonparametric prevalence and mortality estimators for animal experiments with incomplete cause of death data. <u>Journal of the American Statistical Association</u> **81**: 328-336, 1986.
- 14. **Dinse**, GE and Larson, MG: A note on semi-Markov models for partially censored data. <u>Biometrika</u> **73**: 379-386, 1986.

- 15. Portier, CJ and **Dinse**, GE: Semi-parametric analysis of tumor incidence rates in survival/sacrifice experiments. <u>Biometrics</u> **43**: 107-114, 1987.
- 16. **Dinse**, GE: Discussion of "Handling cause of death in equivocal cases using the EM algorithm" by RL Kodell and JJ Chen. <u>Communications in Statistics</u> <u>Theory and Methods</u> **16**: 2587-2592, 1987.
- 17. **Dinse**, GE: Further discussion of "Handling cause of death in equivocal cases using the EM algorithm" by RL Kodell and JJ Chen. <u>Communications in Statistics</u> <u>Theory and Methods</u> **16**: 2597-2601, 1987.
- 18. **Dinse**, GE: Estimating tumor incidence rates in animal carcinogenicity experiments. Biometrics **44**: 405-415, 1988.
- 19. **Dinse**, GE: Simple parametric analysis of animal tumorigenicity data. <u>Journal of the American Statistical Association</u> **83**: 638-649, 1988.
- 20. **Dinse**, GE: A prevalence analysis that adjusts for survival and tumor lethality. <u>Journal of the Royal Statistical Society</u>, <u>Series C</u> **37**: 435-445, 1988.
- 21. Hoel, DG and **Dinse**, GE: Using mortality data to estimate radiation effects on breast cancer incidence. <u>Environmental Health Perspectives</u> **87**: 123-129, 1990.
- 22. **Dinse**, GE: Constant risk differences in the analysis of animal tumorigenicity data. Biometrics **47**: 681-700, 1991.
- 23. **Dinse**, GE and Hoel, DG: Exploring time trends in cancer incidence. <u>Cancer Causes and Control</u> **3**: 409-417, 1992.
- 24. **Dinse**, GE, Piegorsch, WW, and Boos, DD: Confidence statements about the time range over which survival curves differ. <u>Journal of the Royal Statistical Society</u>, <u>Series C</u> **42**: 21-30, 1993.
- 25. **Dinse**, GE: Evaluating constraints that allow survival-adjusted incidence analyses in single-sacrifice studies. <u>Biometrics</u> **49**: 399-407, 1993.
- 26. **Dinse**, GE: A comparison of tumor incidence analyses applicable in single-sacrifice animal experiments. <u>Statistics in Medicine</u> **13**: 689-708, 1994.
- 27. Davis, DL, **Dinse**, GE, and Hoel, DG: Decreasing cardiovascular disease and increasing cancer among whites in the United States from 1973 to 1987: Good news and bad news. <u>Journal of the American Medical Association</u> **271**: 431-437, 1994.
- 28. Malarkey, DE, Devereux, TR, **Dinse**, GE, Mann, PC, and Maronpot, RR: Hepatocarcinogenicity of chlordane in B6C3F1 and B6D2F1 male mice: evidence for regression in B6C3F1 mice and carcinogenesis independent of *ras* proto-oncogene activation. Carcinogenesis **16**: 2617-2625, 1995.
- 29. **Dinse**, GE, Umbach, DM, Sasco, AJ, Hoel, DG, and Davis, DL: Unexplained increases in cancer incidence in the United States from 1975 to 1994: Possible sentinel health indicators? <u>Annual Review of Public Health</u> **20**: 173-209, 1999.

- 30. Rogan, WJ, Ragan, NB, and **Dinse**, GE: X-ray evidence of increased asbestos exposure in the US population from NHANES I and NHANES II, 1973-1978. <u>Cancer Causes and Control</u> **11**: 441-449, 2000.
- 31. Dunson, DB and **Dinse**, GE: Distinguishing effects on tumor multiplicity and growth rate in chemoprevention experiments. <u>Biometrics</u> **56**: 1068-1075, 2000.
- 32. Tully, DB, Collins, BJ, Overstreet, JD, Smith, CS, **Dinse**, GE, Mumtaz, MM, and Chapin, RE: Effects of arsenic, cadmium, chromium, and lead on gene expression regulated by a battery of 13 different promoters in recombinant HepG2 cells. <u>Toxicology and Applied Pharmacology</u> **168**: 79-90, 2000.
- 33. Dunson, DB and **Dinse**, GE: Bayesian incidence analysis of animal tumorigenicity data. <u>Journal of the Royal Statistical Society</u>, <u>Series C</u> **50**: 125-141, 2001.
- 34. Parise, H, **Dinse**, GE, and Ryan, LM: Flexible estimates of tumor incidence for intermediately lethal tumors in a typical long-term animal bioassay. <u>Journal of the Royal Statistical Society</u>, <u>Series C</u> **50**: 171-185, 2001.
- 35. Dunson, DB and **Dinse**, GE: Bayesian models for multivariate current status data with informative censoring. <u>Biometrics</u> **58**: 79-88, 2002.
- 36. Takahashi, K, **Dinse**, GE, Foley, JF, Hardisty, JF, and Maronpot, RR: Comparative prevalence, multiplicity, and progression of spontaneous and vinyl carbamate-induced liver lesions in five strains of male mice. <u>Toxicologic Pathology</u> **30**: 599-605, 2002.
- 37. Peddada, SD, **Dinse**, GE, and Haseman, JK: A survival-adjusted quantal response test for comparing tumor incidence rates. <u>Journal of the Royal Statistical Society</u>, <u>Series C</u> **54**: 51-61, 2005.
- 38. Suttie, AW, **Dinse**, GE, Nyska, A, Moser, GJ, Goldsworthy, TL, and Maronpot, RR: An investigation of the effects of late-onset dietary restriction on prostate cancer development in the TRAMP mouse. Toxicologic Pathology **33**: 386-397, 2005.
- 39. Peddada, SD, **Dinse**, GE, and Kissling, GE: Incorporating historical control data when comparing tumor incidence rates. <u>Journal of the American Statistical Association</u> **102**: 1212-1220, 2007.

## **Manuscripts Submitted or In Preparation:**

- 1. Wang, QH, **Dinse**, GE, and Liu, C: Hazard function estimation with cause-of-death data missing at random (submitted, <u>Canadian Journal of Statistics</u>).
- 2. Wang, QH and **Dinse**, GE: Regression analysis with censoring indicators missing at random (submitted, <u>Biometrics</u>).
- 3. Han, YY, **Dinse**, GE, Umbach, DM, Davis, DL, and Weissfeld, JL: Age-period-cohort analysis of cancers not related to tobacco, screening, or HIV: Sex and race differences (submitted, Cancer).

- 4. Han, YY, Davis, DL, Weissfeld, JL, Umbach, DM, and **Dinse**, GE: Generational risks for selected cancer groupings in the United States (revision invited, <u>Environmental Health Perspectives</u>).
- 5. Han, YY, Davis, DL, Umbach, DM, and **Dinse**, GE: Non-Hodgkin's lymphoma incidence: Comparing temporal patterns in the Pennsylvania and SEER registries (in preparation).
- 6. **Dinse**, GE and Dunson, DB: Causal inferences in carcinogenicity studies (in preparation).
- 7. Dunson, DB and **Dinse**, GE: Bayesian analysis of constrained hazard functions (in preparation).
- 8. Malarkey, DE, Enomoto, A, **Dinse**, GE, and Maronpot, RR: Hepatocarcinogenicity and tumor-promoting activity of 2,3,7,8-tetrachlorodibenzo-P-dioxin (TCDD) in male and female C57BL/6 and B6C3F1 mice (in preparation).

## **Proceedings, Reviews, and Book Chapters:**

- 1. **Dinse**, GE: Estimating tumor prevalence, lethality and mortality. In: <u>Proceedings of the Symposium on Long-term Animal Carcinogenicity Studies</u>: <u>A Statistical Perspective</u>. American Statistical Association, Washington, DC, 91-99, 1985.
- 2. **Dinse**, GE: Statistical analysis of long-term animal cancer studies. In: <u>Toxicology and Risk Assessment</u>. Eds. AM Fan and LW Chang, Marcel Dekker, New York, 483-502, 1996.
- 3. **Dinse**, GE: Tumor incidence experiments. In: <u>Encyclopedia of Biostatistics</u> (<u>Volume 6</u>). Eds. P Armitage and T Colton, John Wiley, Chichester, 4597-4609, 1998.
- 4. **Dinse**, GE: Three-state carcinogenicity model. In: <u>Encyclopedia of Environmetrics</u> (<u>Volume 1</u>). Eds. A El-Shaarawi and W Piegorsch, John Wiley, Chichester, 263-271, 2001.

#### **Letters:**

- 1. Davis, DL, **Dinse**, GE, and Hoel, DG: Response to a letter to the editor. <u>Science News</u> **145**: 291, 1994.
- 2. Davis, DL, **Dinse**, GE, and Hoel, DG: Response to two letters to the editor. <u>Journal of the American Medical Association</u> **272**: 199-200, 1994.

## **Invited Presentations:**

- 1. **Dinse**, GE: "The use of logistic regression in the analysis of prevalence data from animal tumorigenicity experiments." Meeting of the local chapter of the American Statistical Association, Research Triangle Park, North Carolina, June 6, 1984.
- 2. Haseman, JK and **Dinse**, GE: "Statistical issues in the analysis of tumor incidence data from laboratory animal carcinogenicity studies." Summer Research Conference in Statistics, Arkadelphia, Arkansas, June 14, 1984.

- 3. **Dinse**, GE: "Estimating tumor prevalence, lethality and mortality." Symposium on Longterm Animal Carcinogenicity Studies: A Statistical Perspective, Washington, DC, March 6, 1985.
- 4. **Dinse**, GE: "Statistical analysis of tumorigenicity data." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Atlanta, Georgia, March 17, 1986.
- 5. **Dinse**, GE: "Simple parametric methods for survival/sacrifice experiments." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Boston, Massachusetts, March 29, 1988.
- 6. **Dinse**, GE: "Constrained transition rates in the analysis of animal carcinogenicity studies." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Los Angeles, California, August 9, 1990.
- 7. **Dinse**, GE: "Constant risk differences in the analysis of animal carcinogenicity studies." Local Meeting of the North Carolina Chapter of the American Statistical Association, Research Triangle Park, North Carolina, September 19, 1990.
- 8. **Dinse**, GE: "Survival-adjusted analysis of tumor incidence data in single-sacrifice animal experiments." NIH Conference on Current Topics in Biostatistics, Bethesda, Maryland, January 26, 1993.
- 9. **Dinse**, GE, and Dunson, DB: "Bayesian modeling of multivariate current status data with applications to animal carcinogenicity experiments." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Alexandria, Virginia, March 19, 2002.
- 10. **Dinse**, GE, Peddada, SD, and Kissling, GE: "A survival-adjusted test for comparing tumor incidence rates using historical control data." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Minneapolis, Minnesota, August 10, 2005.
- 11. **Dinse**, GE, and Peddada, SD: "Statistical inference under order restrictions with applications to toxicology." Current and Future Trends in Nonparametrics, Columbia, South Carolina, October 11, 2007.

#### **Contributed Presentations:**

- 1. **Dinse**, GE: "Nonparametric estimation based on partially-complete time and type of failure data." Joint Meetings of the American Statistical Association and the Biometric Society, Richmond, Virginia, March 23, 1981.
- 2. **Dinse**, GE and Lagakos, SW: "The analysis of tumor prevalence data in the presence of covariates." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Cincinnati, Ohio, August 19, 1982.
- 3. **Dinse**, GE: "A simulation study of alternative tumorigenicity trend tests." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Toronto, Ontario, Canada, August 17, 1983.

- 4. **Dinse**, GE: "Estimating disease prevalence and mortality when cause of death is uncertain for some animals." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Philadelphia, Pennsylvania, August 15, 1984.
- 5. **Dinse**, GE, and Dunson, DB: "Bayesian analysis of constrained hazard functions." Joint Statistical Meetings of the American Statistical Association and the Biometric Society, Pittsburgh, Pennsylvania, March 30, 2004.