

**THE UNIVERSITY OF IOWA
COLLEGE OF PUBLIC HEALTH CURRICULUM VITAE**

Brian J. Smith, Ph.D.

October 15, 2007

I. EDUCATIONAL AND PROFESSIONAL HISTORY

A. Education (least to most recent)

(includes undergraduate, graduate, and postgraduate education)

<u>Institution</u>	<u>Dates Attended</u>	<u>Field of Study</u>	<u>Degree Obtained</u>	<u>Degree Date</u>
Saint Louis University	1989-1993	Mathematics	B.A.	1993
University of Texas at Austin	1993-1995	Mathematical Statistics	M.S.	1995
University of Iowa	1995-2001	Biostatistics	Ph.D.	2001

Certification/Licensure

<u>Board</u>	<u>Date</u>
None	

B. Professional and Academic Positions

<u>Position Title</u>	<u>Dates of Service</u>	<u>Location/Institution</u>
Research Scientist	1993-1995	University of Texas at Austin
Graduate Teaching Assistant	1995-1997; 1999-2001	University of Iowa, Iowa City IA
Graduate Research Assistant	1997-1999	University of Iowa, Iowa City IA
Visiting Assistant Professor	2001-2002	Department of Biostatistics The University of Iowa
Assistant Professor	2002-	Department of Biostatistics The University of Iowa
Co-Director	2005-2006	Biostatistics Core, Holden Comprehensive Cancer Center,
Director	2006-	The University of Iowa

C. Honors, Awards, Recognitions, Outstanding Achievements
(least to most recent)

<u>Year</u>	<u>Title</u>
1992	Barry M. Goldwater Grant for Students in the Natural Sciences
1996-97	Biostatistics Student Group President
1997	The University of Iowa Excellence in Teaching Award for Graduate Teaching Assistants
2000	The Statistical Computing Section of the American Statistical Association John M. Chambers Statistical Software Award recognizing outstanding student work in software for statistics. Selected for developing the Bayesian Output Analysis Program.
2001	The University of Iowa College of Public Health Milford E. Barnes Award for most outstanding graduating Biostatistics student
2005	The American Broncho-Esophagological Association Steben D. Gray Resident's Research Award for research on Radiographic and Endoscopic Measurement of Esophageal Length in Pediatric Patients performed by Yang GS, Bishop W, Smith BJ , Goudy S, and Bauman NM and presented at the Association's Annual Scientific Session, Boca Raton, FL
2006	U.S. Environmental Protection Agency (EPA) Children's Environmental Health Recognition Award for contributions by Field RW, Steck DJ, Lynch CF, and Smith BJ to The Heartland Radon Research and Education Program, University of Iowa, Iowa City, IA
2006	ASA Conference on Radiation and Health, New Investigator Award for Research on Spatio-Temporal Modeling of Residential Radon, Pacific Grove, CA
2006	The University of Iowa Innovations in Instructional Computing Award for "Developing a Curriculum for Statistical Analysis of Spatiotemporal Data Using Cyberinfrastructure" proposal by Cowles MK, Armstrong MP, Smith BJ , Yan J, Wang S.

II. TEACHING AT THE UNIVERSITY OF IOWA

A. Teaching Assignments on semester-by-semester basis (least to most recent) (classroom, seminar, teaching lab)

<u>Semester, Year</u>	<u>Course Title/ Number</u>	<u>Semester Hours</u>	<u># Students</u>	<u>Role</u>	<u>Percent Responsible</u>
Fall 2001	Intro to Biostatistics 171:161	3	55	Instructor	100%
Spring 2002	Intro to Biostatistics 171:161	3	30	Instructor	100%
Summer 2002	Intro to Biostatistics 171:161	3	20	Instructor	100%
Fall 2002	Intro to Biostatistics 171:161	3	60	Instructor	100%
Spring 2003	Statistical Methods in Epi II 171:242	3	11	Instructor	70% (100% of Survival Analysis)
Fall 2003	Statistical Methods in Epi 171:241	3	40	Instructor	100%
Fall 2004	Statistical Methods in Epi 171:241	3	35	Instructor	100%
Spring 2005	Applied Survival & Cohort Data Analysis 171:242	3	21	Instructor	100%
Spring 2005	Cohort Data Analysis 171:243	1	2	Instructor	100%
Fall 2005	Applied Cat. Data Analysis 171:241	3	38	Instructor	100%
Spring 2006	Intro to Biostatistics 171:161	3	53	Instructor	100%
Spring 2007	Biostat. Methods in Categorical Data 171:203	3	16	Instructor	100%
Spring 2007	Applied Survival Analysis 171:282	3	10	Supervisor to Minggen Lu	0%
Fall 2007	Applied Cat. Data Analysis 171:241	3	18	Instructor	100%

B. Students Advised

Graduate Students

<u>Name</u>	<u>Degree Objective</u>	<u>Outcome</u>
Qun Guo	MS Biostatistics	Graduated 2004
Xiao Dong Huang	MS Biostatistics	Graduated 2004
Xin Lu	MS Biostatistics	Graduated 2006
Yingwei Qi	MS Biostatistics	Graduated 2006
Laura Acion	PhD Biostatistics	Ongoing
Lei Hua	MS/PhD Biostatistics	Ongoing
Patrick Breheny	MS/PhD Biostatistics	Ongoing

Professional/Postdoctoral Students

<u>Name</u>	<u>Degree Objective</u>	<u>Outcome</u>
None		

Dissertations/Theses

<u>Name</u>	<u>Degree Objective</u>	<u>Role</u>	<u>Outcome</u>
Brenda Bode	MS OEH	Thesis Committee	Conferred 2002
Aaron Christ	PhD Statistics	Dissertation Committee	Conferred 2003
Jessica Ferrie	MS OEH	Thesis Committee	Conferred 2003
Craig Gehrels	MS OEH	Thesis Committee	Conferred 2003
Mike Humann	MS OEH	Thesis Committee	Conferred 2002
Julie Lo	MS OEH	Thesis Committee	Conferred 2003
Yu-Jau Lin	PhD Statistics	Dissertation Committee	Conferred 2003
Lili Zhao	PhD Statistics	Dissertation Committee	Conferred 2006
Subhashish Chakravarty	PhD Statistics	Dissertation Committee	Conferred 2007
Katie Tharp	PhD Epi	Comp Exam Committee	Passed 2003
Suma Konety	MPH Epi	Thesis Committee	Passed 2004
Sara Imhof	PhD HMP	Comp Exam Committee	Passed 2004

Diana Abbott	PhD Statistical Genetics	Dissertation Committee	Ongoing
Veerasathpurush Allareddy	PhD HMP	Dissertation and Comp Exam Committee	Ongoing
Emine Bayman	PhD Biostatistics	Dissertation Committee	Ongoing
Yiyi Chen	PhD Biostatistics	Dissertation Committee, Chair	Ongoing
Dominic Cirillo	PhD Epi	Dissertation Committee	Ongoing
Vijay Golla	PhD in OEH	Dissertation and Comp Exam Committee	Ongoing
Alicia Quella	PhD Epi	Dissertation Committee	Ongoing
Jung-Eun Song	PhD Statistics	Dissertation Committee	Ongoing
Kainan Sun	PhD OEH	Dissertation Committee	Ongoing
Chetan Tiwari	PhD Geography	Dissertation Committee	Ongoing
Ning Yan	PhD Statistics	Dissertation Committee	Ongoing

C. Other Advising/Mentoring

<u>Name</u>	<u>Degree Objective</u>	<u>Role</u>	<u>Outcome</u>
Adam Summers	MS Biostatistics	Preceptorship Advisor	Completed 2003
Qun Guo	MS Biostatistics	Preceptorship Advisor	Completed 2004
Boikanyo Makubate	MS Biostatistics	Preceptorship Advisor	Completed 2004
Sanjukta Modak	MS Biostatistics	Preceptorship Advisor	Completed 2005
Zugui Zhang	PhD Biostatistics	Preceptorship Advisor	Completed 2005
Lixun Zhang	MS Biostatistics	Preceptorship Advisor	Completed 2005
Li Zhou	MS Biostatistics	Preceptorship Advisor RA Supervisor	Completed 2006
Kainan Sun	MS Biostatistics	Preceptorship Advisor	Completed 2006
Shanshan Zhao	MS Biostatistics	RA Supervisor	Completed 2007
Lei Hua	PhD Biostatistics	RA Supervisor	Ongoing

D. Other Contributions to Institutional Programs

Institutional Conferences, Grand Rounds, Journal Clubs

<u>Year</u>	<u>Title</u>	<u>Location</u>
1997-99	Biostatistics Student Journal Club	University of Iowa
2006	Hematology, Oncology, and Blood & Marrow Transplantation Core Lecture Series, Guest Lecturer	University of Iowa

Teaching Committees

<u>Year</u>	<u>Committee Name</u>
1996-97	Preventive Medicine Teaching Evaluation and Promotion Committee, Student Representative
2002-05 2006-07	Biostatistics PhD Comprehensive Examination Committee
2003-06	Biostatistics Seminar Committee Chair, Fall 2004 Chair, Spring 2006
2003-07	Biostatistics Masters Comprehensive Examination Committee Chair, 2005-06
2003-04	College of Public Health Instructional Development and Evaluation
2003-05	Epidemiology Masters Comprehensive Examination Committee

National Education-Related Presentations

<u>Year</u>	<u>Title</u>
None	

Formal Study to Improve Teaching Abilities

<u>Year</u>	<u>Institution</u>	<u>Course Title</u>
None		

Current Research Concerning Teaching

<u>Title</u>
None

Local and Regional CME Talks

<u>Year</u>	<u>Title</u>	<u>Location</u>
None		

E. Course Materials (syllabi, instructional web pages, computer lab materials)
(Description only – *full materials to be included in promotion dossier*)

Applied Categorical Data Analysis (Fall 2003, 2004, 2005, 2007)

- Syllabus
- Course Website
- Course Notes Package
- Homework Assignments and Exams

Applied Survival and Cohort Data Analysis (Spring 2003, 2005)

- Syllabus
- Course Website
- Course Notes Package
- Computer Lab Instructions and Exercises
- Homework Assignments and Final Project

Introduction to Biostatistics (Fall 2001; Spring, Summer and Fall 2002; Spring 2006)

- Syllabus
- Course Website
- Computer Lab Instructions and Exercises
- Homework Assignments and Exams

F. Teaching Improvement Activities

June 2004 “Teaching Toward Competencies”, Dept. Epidemiology Faculty Retreat

III. SCHOLARSHIP

A. Publications or Creative Works (least to most recent)

- 1) *Please number*
- 2) *Please include names of all authors instead of et al. (if available).*
- 3) *Use minimal punctuation.*

Peer-Reviewed Papers

1. Field RW, **Smith BJ**, Brus CP, Lynch CF, Neuberger JS, and Steck DJ. Retrospective Temporal and Spatial Mobility of Adult Iowa Women. Risk Analysis 18(5):575-584, 1998.
2. **Smith BJ**, Field RW, and Lynch CF. Residential Rn-222 Exposure and Lung Cancer: Testing the Linear No-threshold Theory with Ecologic Data. Health Physics 75(1):11-17, 1998.

3. Fisher EL, Field RW, **Smith BJ**, Lynch CF, Steck DJ, and Neuberger JS. Spatial Variation of Residential Radon Concentrations: The Iowa Radon Lung Cancer Study. Health Physics 75(5):506-513, 1998.
4. Field RW, **Smith BJ**, and Lynch CF. Ecologic Bias, a Rejoinder to Cohen's Response to "Residential Rn-222 Exposure and Lung Cancer: Testing the Linear No-threshold Theory with Ecologic Data". Health Physics 75(1), 31-33, 1998.
5. Field RW, **Smith BJ**, and Lynch CF. Response to Straja and Moghissi Concerning Ecologic Studies. Health Physics 76(3):318-319, 1999.
6. Field RW, Lynch CF, Steck DJ, **Smith BJ**, Brus CP, Neuberger JS, Woolson RF, Fisher EF, Platz CE, and Robinson RA. Iowa Radon Lung Cancer Study. Radiation Research 151:101-103, 1999.
7. Field RW, **Smith BJ**, and Lynch CF. Cohen's Paradox. Health Physics 77(3):328-329, 1999.
8. Field RW, Steck DJ, **Smith BJ**, Brus CP, Fisher EF, Neuberger JS, Platz CE, Robinson RA, Woolson RF, and Lynch CF. Residential Radon Gas Exposure and Lung Cancer: The Iowa Radon Lung Cancer Study. American Journal of Epidemiology 151(11):1091-1102, 2000.
9. Field RW, Steck DJ, **Smith BJ**, Brus CP, Fisher EF, Neuberger JS, and Lynch CF. The Iowa Radon Lung Cancer Study Phase I: Residential Radon Gas Exposure and Lung Cancer. The Science of the Total Environment 272:67-72, 2001.
10. Field RW, **Smith BJ**, Steck DJ, Lynch CF. Residential Radon Exposure and Lung Cancer: Variation in Risk Estimates using Alternative Exposure Scenarios. Journal of Exposure Analysis & Environmental Epidemiology 12(3):197-203, 2002.
11. Rose SL, Goodheart MJ, DeYoung BR, **Smith BJ**, and Buller RE. p21 Expression Predicts Outcome in p53-null Ovarian Cancer. Clinical Cancer Research 9:1028-1032, 2003.
12. Rose SL, Robertson AD, Goodheart MJ, **Smith BJ**, DeYoung BR, Buller RE. The Impact of p53 Protein Core Domain Structural Alteration on Ovarian Cancer Survival. Clinical Cancer Research 9:4139-4144, 2003.
13. Joudi FN, **Smith BJ**, O'Donnell MA, Konety B. Contemporary Management of Superficial Bladder Cancer in the United States: A Pattern of Care Analysis. Urology 62:1083-1088, 2003.
14. Stone PJ, Goodheart MJ, Rose SL, **Smith BJ**, DeYoung BR, Buller RE. The Influence of Microvessel Density on Ovarian Carcinogenesis. Gynecologic Oncology 90:566-571, 2003.
15. Field RW, **Smith BJ**, Platz CE, Robinson RA, Neuberger JS, Brus CP, Lynch CF. Lung Cancer Histologic Type in the Surveillance, Epidemiology, and End Results Registry versus Independent Review. Journal of the National Cancer Institute 96:1105-1107, 2004.

16. Dennis LK, Snetselaar LG, **Smith BJ**, Stewart RE, Robbins ME. Problems with the Assessment of Dietary Fat in Prostate Cancer Studies. American Journal of Epidemiology 160(5):436-444, 2004.
17. Humann MJ, Donham KJ, Jones ML, Achutan C, **Smith BJ**. Occupational Noise Exposure Assessment in Intensive Swine Farrowing Systems: Dosimetry, Octave Band, and Specific Task Analysis. Journal of Agromedicine 10(1):23-37, 2005.
18. Jacobson GM, Kamath RS, **Smith BJ**, Goodheart M. Thromboembolic Events in Patients Treated with Definitive Chemotherapy and Radiation Therapy for Invasive Cervical Cancer. Gynecologic Oncology 96:470-474, 2005.
19. Robinson JG, **Smith B**, Maheshwari N, Schrott H. "Pleiotropic" Effects of Statins: Benefit Beyond Cholesterol Reduction? A Meta-regression Analysis. Journal of the American College of Cardiology 46:1855-1862, 2005.
20. Yang GS, Bishop W, **Smith BJ**, Goudy S, Bauman NM. Radiographic and Endoscopic Measurement of Esophageal Length in Pediatric Patients. The Annals of Otolaryngology, Rhinology, and Laryngology 114(8):587-592, 2005.
21. Joudi FN, **Smith BJ**, O'Donnell MA, Konety BR. The Impact of Age on Response of Patients with Superficial Bladder Cancer to Intravesical Immunotherapy. The Journal of Urology 175(5):1634-1640; discussion 1639-1640, 2006.
22. Konety BR, Veerasathpurush A, Modak S, **Smith B**, Luft HS. Mortality Following Major Surgery for Urologic Cancers in Specialized Urology Hospitals: Are They Any Better? Journal of Clinical Oncology 1:24(13):2006-2012, 2006.
23. Weyer PJ, **Smith BJ**, Feng ZF, Kantamneni JR, Riley DG. Comparison of Nitrate Levels in Raw Water and Finished Water from Historical Monitoring Data on Iowa Municipal Drinking Water Supplies. Environmental Monitoring and Assessment 116(1-3):81-90, 2006.
24. Joudi FN, **Smith BJ**, O'Donnell MA, National BCG-Interferon Phase 2 Investigator Group. Final Results from a National Multicenter Phase II Trial of Combination Bacillus Calmette-Guérin plus Interferon α -2B for Reducing Recurrence of Superficial Bladder Cancer. Urologic Oncology 24(4):344-348, 2006.
25. Slane BG, Aykin-Burns N, Andrekopoulos C, Kalyanaraman B, **Smith BJ**, Domann FE, Spitz DR. Mutation of Succinate Dehydrogenase Subunit C Results in Increased $O_2^{\bullet-}$, Oxidative Stress, and Genomic Instability. Cancer Research 66(15):7615-7620, 2006.
26. Jacobson G, Betts V, **Smith B**. Change in Volume of Lumpectomy Cavity during External Beam Irradiation of the Intact Breast. International Journal of Radiation Oncology, Biology, and Physics 65(4):1161-1164, 2006.
27. Zhang Y, **Smith BJ**, Spitz DR, Oberley LW. Enzymatic Activity is Necessary for the Tumor Suppressive Effects of MnSOD. Antioxidants and Redox Signaling 8(7-8):1282-93, 2006.

28. Lal G, Padmanabha L, **Smith BJ**, Nicholson RM, Howe JR, O'Dorisio MS, Domann FE. RIZ1 is Epigenetically Inactivated by Promoter Hypermethylation in Thyroid Carcinoma. Cancer 107(12):2752-2759, 2006.
29. Liu J, Du J, Zhang Y, Sun W, **Smith BJ**, Oberley LW, Cullen JJ. Suppression of the Malignant Phenotype in Pancreatic Cancer by Overexpression of Phospholipid Hydroperoxide Glutathione Peroxidase. Human Gene Therapy 17(1):105-116, 2006.
30. **Smith BJ**, Cowles MK. Correlating Point-Referenced Radon and Areal Uranium Data Arising from a Common Spatial Process. Journal of the Royal Statistical Society, Series C 56(3):313-326, 2007.
31. Bowles JA, Wang S-Y, Link BK, Allan B, Beuerlein G, Campbell M-A, Marquis D, Ondek B, Wooldridge JE, **Smith BJ**, Breitmeyer JB, and Weiner GJ. Anti-CD20 Monoclonal Antibody with Enhanced Affinity for CD16 Activates NK Cells at Lower Concentrations and More Effectively than Rituximab. Blood 108(8):2648-2654, 2006.
32. **Smith BJ**, Field RW. Effect of Housing Factors and Surficial Uranium on the Spatial Prediction of Residential Radon in Iowa. Environmetrics 18(5):481-497, 2006.
33. Zhang Z, **Smith BJ**, Steck DJ, Guo Q, Field RW. Variation in Yearly Residential Radon Concentrations in the Upper Midwest. Health Physics, 93(4):288-297, 2007.
34. **Smith BJ**, Zhang L, Field RW. Iowa Radon Leukemia Study: A Hierarchical Population Risk Model for Spatially Correlated Exposure Measured with Error. Statistics in Medicine, 2007 Mar; [Epub ahead of print].
35. Khanna G, O'dorisio MS, Menda Y, Glasier C, Deyoung B, **Smith BJ**, Graham M, Juweid M. Somatostatin Receptor Scintigraphy in Surveillance of Pediatric Brain Malignancies. Pediatric Blood & Cancer, 2007 Mar 26 [Epub ahead of print].
36. Goodheart M, Jacobson G, **Smith BJ**, Zhou L. Chemoradiation for Invasive Cervical Cancer in Elderly Patients: Outcomes and Morbidity. International Journal of Gynecological Cancer, 2007 April 16 [Epub ahead of print].
37. Oleson JJ, **Smith BJ**, Kim H. Joint Spatio-Temporal Modeling of Low Incidence Cancers Sharing Common Risk Factors. (In press Journal of Data Science, 2007)
38. Cullen JJ, Coleman MC, Asbury CR; Daniels D, Du J, Aykin-Burns N, Smith BJ, Li L, Spitz DR. 2-Deoxy-D-Glucose Causes Cytotoxicity, Oxidative Stress, and Radiosensitization in Pancreatic Cancer. (In press Free Radical Biology & Medicine, 2007)
39. Smith BJ, Oleson JJ. Geostatistical Hierarchical Model for Temporally Integrated Data Measured with Error. (In press, Journal of Agricultural, Biological, and Environmental Statistics, 2007)
40. Smith BJ. boa: An R Package for MCMC Output Convergence Assessment and Posterior Inference. (In press Journal of Statistical Software, 2007)

Non-Peer-Reviewed Papers (reports, proceedings, etc.)

None

Books/Monographs

None

Chapters

None

Electronic Publications

1. **Smith BJ**. (April 18, 2007) boa: Bayesian Output Analysis Program (BOA) for MCMC, Version 1.1.6. [On-line]. Available: cran.r-project.org/src/contrib/Descriptions/boa.html.
2. **Smith BJ**, Yan J, and Cowles, MK. (September 24, 2007) ramps: Bayesian Geostatistical Modeling with RAMPS, Version 0.5. [On-line]. Available: cran.r-project.org/src/contrib/Descriptions/ramps.html.

Abstracts

1. Nguyen TN*, **Smith BJ**, McCready C, O'Donnell A, and Konety BR. Impact of Intravesical BCG plus Interferon-Alpha (IFN- α) Therapy for Superficial Bladder Cancer on Quality of Life. American Urological Association 2002 Annual Meeting.
2. Rose SL*, Goodheart MJ, DeYoung BR, **Smith BJ**, Blake LM and Buller RE. The Relationship between p21 Expression and p53 Gene Mutation impacts Ovarian Cancer Survival. American Association for Cancer Research 2002 Annual Meeting.
3. Stone PJB*, Goodhart MJ, Rose SL, **Smith BJ**, DeYoung BR, Buller RE. The Influence of Microvessel Density on Ovarian Carcinogenesis. Western Association of Gynecologic Oncologists 2002 Annual Meeting.
4. Jacobson GM*, Betts VL, **Smith BJ**. Correlation of Two Dimensional Simulation Film Measurements with Ipsilateral Lung Dose-Volume Histograms Determined by Three Dimensional Treatment Planning for Chest Wall Radiation Following Mastectomy. Radiological Society of North America 2004 Annual Meeting.
5. Chang BK*, Goodheart MJ, **Smith BJ**, Jacobson G. Outcome and Pattern of Failure in Pathologic Stage I Endometrial Cancer Treated with Surgery and Pelvic Lymph Node Sampling Alone. American Society for Therapeutic Radiation and Oncology 2004 Annual Meeting.
6. Jacobson G*, Betts V, **Smith B**. Change in Volume of Lumpectomy Cavity during External Beam Irradiation of the Intact Breast. American Society for Therapeutic Radiology and Oncology 2005 Annual Meeting.
7. Wilkinson N*, Howe J, Scott-Conner C, **Smith B**, Donohue J. Risk Factors and Management of Proximal and Distal Gastric Cancer in the United States: Results of the 2001 Gastric Patient Care Evaluation. American Society of Clinical Oncology 2006 Gastrointestinal Cancers Symposium.

8. Wilkinson N*, Howe J, Scott-Conner C, **Smith B**, Donohue J. Risk Factors and Management of Proximal and Distal Gastric Cancer in the United States: Results of the 2001 Gastric Patient Care Evaluation. American Society of Clinical Oncology 2006 Gastrointestinal Cancers Symposium. Society of Surgical Oncology 2006 Annual Meeting.
9. Calva-Cerqueira D*, **Smith BJ**, Hostetler ML, Menda Y, O'Dorisio TM, Howe JR. Minimally Invasive Parathyroidectomy and Preoperative MIBI Scans: Threshold Values for Gland Weight and Preoperative PTH and Positive Predictive Value of MIBI Scans. American Association of Endocrine Surgeons 2006 Annual Meeting.
10. Scott-Conner CE*, Romitti PA, Lynch CF, Wilkinson N, Lal G, Zhou L, **Smith BJ**. Influence of Pregnancy on Breast Cancer Tumor Characteristics and Mortality in Iowa Women. American Society of Clinical Oncology 2006 Annual Meeting.
11. Rich NT*, **Smith BJ**, Vaena DA. Correlation of statin use and duration with increased survival in hormone refractory prostate cancer. American Society of Clinical Oncology 2006 Annual Meeting.
12. Khanna G*, O'Dorisio MS, Juweid M, Menda Y, Graham M, Glasier C, O'Dorisio T, **Smith BJ**, Young BD, Sato Y. Somatostatin Receptor Scintigraphy for Post-therapy Surveillance of Pediatric Central Nervous System Tumors. 2006 Carcinoid/NET Physician Symposium.
13. Adams LA*, **Smith BJ**, Calva-Cerqueira D, Howe JR, Lal G. Young and Single: The Case for Limited Neck Exploration in Young Adults with Sporadic Primary Hyperparathyroidism. 2006 Annual Meeting of the American Association of Endocrine Surgeons.

* Abstract presenter.

Reviews

None

Other (example, letter to the editor)

1. None

B. Areas of Research Interest/Current Projects

1. Bayesian statistics
2. Computational statistics
3. Spatial statistics and environmental exposure assessment

C. Grants Received (*ALL grants*, least to most recent)
 (if you are not the PI, state your role or contributions – in a few sentences)

Title Source P.I.	% Effort %Salary Support	Direct Funds Period of Funding
Iowa and Missouri Radon Lung Cancer Studies National Cancer Institute 5 R01 CA85942-2 PI: Robert W. Field Co-investigator: Brian J. Smith The goals of this study are: 1) to examine whether residual radon progeny, as measured by radon “glass” detectors, are associated with increased risk of developing lung cancer after controlling for confounders; 2) to determine whether the shape of the dose response curve is linear or nonlinear; and 3) whether exposure to radon progeny are related to incidence of adenocarcinoma.	6.5% Effort 6.5% Funding	1/17/01-12/31/05 \$250,000
Cancer Center Support Grant National Cancer Institute 5 P30 CA86862-07 PI: George J. Weiner Biostatistician: Brian J. Smith This Cancer Center Support Grant is to support the Research activities of the Holden Comprehensive Cancer Center at The University of Iowa.	30% Effort 30% Funding	7/1/00/-6/30/10 \$850,000
Bayesian Models for Meta-Analysis: The Impact of Dietary Fat Intake on Prostate Cancer CPH-COM New Investigator Award PI: Brian J. Smith The primary goal of this research is to develop a Bayesian modeling strategy for conducting a meta-analysis of published epidemiologic studies on dietary fat intake and prostate cancer.	0% Funding	1/1/03-1/31/03 \$5,000

Comprehensive Assessment of Rural Health in Iowa	10% Effort 10% Funding	1/1/04 – 8/31/06 \$396,981
Iowa Department of Public Health 5883CA02	(ending 1/2005)	

PI: Kelly J. Donham

Consultant: Brian J. Smith

The primary goal of this research is to assess the feasibility of developing a surveillance system that links health encounter data with environmental exposure data within a geographic information system. Provide statistical support in modeling environmental exposures and assessing the associated disease risk.

Cumulative Sun Exposure and Melanoma: A Meta-Analysis	10% Effort 10% Funding	1/1/2004- 12/31/05 \$261,000
American Cancer Society RSGPB-04-008-01-CPPB		

PI: Leslie K. Dennis

Co-Investigator: Brian J. Smith

The primary goal is to conduct a meta-analysis of published estimates of the effect of sun exposure on melanoma risk. Develop meta-analysis models, perform the analyses, and provide general statistical support.

Sexually Transmitted Infections as a Risk Factor for Prostate Cancer among Military Personnel	6% Effort 6% Funding	4/1/2004-1/1/07 \$553,125
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Department of Defense

PC030310

PI: Leslie K. Dennis

Co-Investigator: Brian J. Smith

The primary goal is to conduct a meta-analysis of published estimates of the effect of sexually transmitted infections on prostate cancer risk. Develop meta-analysis models, perform the analyses, and provide general statistical support.

Lymphoma Specialized Program of Research Excellence (SPORE)	10% Effort 10% Funding	9/1/02-6/30/11 \$10,978,316
National Cancer Institute P50 CA097274-04	15% Funding 7/1/07	

PI: Weiner, George

Biostatistician Core Director: Brian J. Smith

The objectives of the SPORE are to understand the immunological mechanisms underlying anti-lymphoma monoclonal antibody therapy in an effort to treat lymphomas using a variety of modalities.

Evaluation of the Edit Process as Applied to Lung Cases (SEER) N01-PC-35143 PI: Lynch, Charles Co-Investigator: Brian J. Smith	2.5% Effort 2.5% Funding 1.57%	8/1/03-7/31/10 \$2,788,639.00 (Salary Support 12/1/05-09/30/06) (Salary Support 6/1/07-9/30/07)
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The goal is to assess the reason(s) for data field changes being made in the cancer specific fields of abstracts during the manual edit process, and application of SEER*Edits and Iowa specific edits.

Ad5-TRAIL Gene Therapy for Prostate Cancer DOD X81XWH-05-1-0536 PI: Williams, Richard Co-Investigator: Brian J. Smith	5% Effort 5% Funding	5/19/06-4/30/08 \$190,000.00 (Salary Support 5/19/06-4/30/07)
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A Phase I clinical trial to determine the local and systemic toxicity associated with intraprostatic injection of Ad5-TRAIL delivered in either fluid-phase or Gelfoam. Examine the distribution of Ad5-TRAIL within the human prostate after transperineal injection and determine the effect of transperineal injection on prostate cancer.

Statistics in Microbiology, Infectious Diseases & Bioinformatics NIH/NIGMS 1 T32 GM077973-01 PI: Chaloner, Kathryn Mentor: Brian J. Smith	0%	8/1/06-6/30/07 \$65,746 yr 1
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The goal of this training program is to train biostatisticians to take a leadership role in developing new interdisciplinary scientific research. This will be achieved by providing rigorous training in the disciplines of statistics and microbiology, and also providing interdisciplinary training in bioinformatics. This training program will provide a structure that will strengthen existing collaborations, and train a new generation of biostatisticians to advance biomedical and clinical research.

D. Invited Presentations (least to most recent)

<u>Year</u>	<u>Title</u>	<u>Organization</u>
1998	Biostatistics Seminar Series, Iowa Radon Lung Cancer Study: Modeling the Linear Excess Risk of Lung Cancer associated with Radon Exposure. Smith BJ*	The University of Iowa, Iowa City, IA
1998	Preliminary Findings of the Iowa Radon Lung Cancer Study. Field RW*, Steck DJ, Smith BJ , Brus CP, Fisher EF, Neuberger JS, Lynch CF.	Council of Radiation Control Program Directors, U.S. Environmental Protection Agency; Cherry Hill, NJ
1998	Preliminary Findings of the Iowa Radon Lung Cancer Study. (Keynote Speaker – Field) Field RW*, Steck DJ, Smith BJ , Brus CP, Fisher EF, Neuberger JS, Lynch CF,	American Association of Radon Scientists and Technologists; Cherry Hill, NJ
1999	Beyond BEIR VI – The Iowa Radon Lung Cancer Study. (Keynote Speaker – Field) Field RW*, Steck DJ, Smith BJ , Brus CP, Fisher EF, Neuberger JS, Lynch CF.	Univ. of Illinois at Chicago School of Public Health, Illinois Dept. of Nuclear Safety, Radon Professionals Conference; Peoria IL
1999	The Iowa Radon Lung Cancer Study Phase I: Residential Radon Gas Exposure and Lung Cancer. Field RW*, Steck DJ, Smith BJ , Brus CP, Fisher EF, Neuberger JS, Lynch CF.	European Commission, Directorate General for Science, R&D Radiation Research Unit, Radon in the Living Environment, Athens, Greece
1999	The Iowa Radon Lung Cancer Study Phase I: Improved Methods for Residential Radon Exposure Assessment. Field RW*, Steck DJ, Smith BJ , Brus CP, Fisher EF, Neuberger JS, Lynch CF.	National Institute for Environmental Health Sciences, Interagency Workshop on the Role of Human Exposure Assessment in the Prevention of Environmental Disease; Rockville, MD

1999	What Do We Know about the Risk posed by Residential Radon? The Iowa Radon Lung Cancer Study. Field RW*, Steck DJ, Smith BJ , Brus CP, Fisher EF, Neuberger JS, Lynch CF.	Illinois Environmental Health Association, Annual Education Conference; Peoria, IL
2000	Biostatistics Seminar Series, Assessing the Proportion of Treatment Effect Captured by Two Surrogate Markers Measured Longitudinally. Cowles MK*, Smith BJ	The University of Iowa; Iowa City, IA
2002	Introduction to Biostatistics. Smith BJ *	UI College of Public Health, Environmental Health Sciences Institute for Rural Youth
2003	Iowa Radon Lung Cancer Study: Exposure Assessment. Field RW*, Lynch CF, Steck DJ, Smith BJ , Brus CP, Neuberger JS, Woolson RF, Fisher EF, Platz CE, Robinson RA	American Chemical Society; New York City, NY
2004	Bayesian Statistics: An Idea Whose Time has Come. Smith BJ *	Arkansas State University Statistics Symposium; Jonesboro, AR
2004	Iowa and Missouri Residential Radon Studies: State-of-the-Art Exposure Assessment. (Invited poster). Field RW*, Steck DJ, Smith BJ , Lynch CF, Lubin JH, Parkhurst MA, Alavanja MCR	First National Cancer Institute Leadership Workshop: Tobacco, Diet, and Genes; Chicago, IL
2004	Prostate Cancer Meta-Analysis: Combining Dose-Response Data, Study-Specific Covariates, and Dietary Quality Scores. Smith BJ *, Dennis LK, Snetselaar LG	College of Public Health Faculty Meeting; The University of Iowa, Iowa City, IA
2004	Modeling the Distribution of Radon Levels in Iowa: Combining Multiple Sources of Spatial Data. Smith BJ *	Kohn Colloquium, Department of Geography; The University of Iowa, Iowa City, IA

2004	Modeling the Distribution of Environmental Radon Levels in Iowa: Combining Multiple Sources of Spatially Misaligned Data. Smith BJ*	Department of Statistics Colloquium; The University of Iowa, Iowa City, IA
2006	Geostatistical Hierarchical Model for Temporally Integrated Data Measured with Error. Smith BJ* , Oleson JJ	Department of Biostatistics Seminar; The University of Iowa, Iowa City, IA
2006	Fusing Point-Referenced Radon Data with Areal Uranium Data Arising from a Common Spatial Process. Smith BJ* , Cowles MK	Interface Foundation of North American 2006 Annual Meeting, Pasadena, CA
2006	Fusing Point-Referenced Radon Data with Areal Uranium Data Arising from a Common Spatial Process. Cowles MK*, Smith BJ	Department of Statistics Seminar; University of Wisconsin, Madison, WI
2007	Joint Spatio-Temporal Modeling of Low Incidence Cancers Sharing Common Risk Factors. Oleson JJ*, Smith BJ	Department of Statistics Seminar; Iowa State University, Ames, IA

* Conference presenter.

Conference Presentations/Posters

<u>Year</u>	<u>Title</u>	<u>Organization</u>
1998	Indoor radon and risk of lung cancer: Iowa Radon Lung Cancer Study. Field RW*, Steck DJ, Smith BJ , Brus CP, Fisher EF, Neuberger JS, Lynch CF	American Statistical Association; San Diego, CA
2000	Bayesian Spatial Analysis for Data obtained from Multiple Measurement Sources. Smith BJ* , Cowles MK	Eastern North American Region of the International Biometry Society; Chicago, IL
2000	Bayesian Spatial Analysis of Radon Exposure Data from the Iowa Radon Lung Cancer Study. Smith BJ* , Cowles MK	American Statistical Association, Iowa Chapter, Annual Meeting; Indianola, IA

2000	Bayesian Spatial Analysis of Radon Exposure Data from the Iowa Radon Lung Cancer Study. Smith BJ* , Cowles MK	American Statistical Association JSM; Indianapolis, IN
2001	Bayesian Risk Analysis of Radon Exposure Data from the Iowa Radon Lung Cancer Study. Smith BJ*	Univ. of Florida Dept. Statistics, Conference on Monte Carlo in the New Millennium; Gainesville, FL
2004	A Bayesian Meta-Analysis of the Impact of Dietary Fat Intake on Prostate Cancer Risk. Smith BJ* , Dennis LK, Snetselaar LG	University of Iowa College of Medicine Research Week; Iowa City, IA
2004	Is Being Obese and Eating a Low Carbohydrate Diet the Norm among Both Sexes – A Cross Sectional Survey Study in a Rural Community of Iowa. Bardia A*, Snetselaar LG, Smith BJ , Lowe J, Peterson J, Faryle N	American College of Epidemiology 2004 Annual Meeting, Boston, MA
2005	Maspin Expression is Activated by Loss of Promoter Methylation in Ovarian Carcinoma. Rose SL*, Fitzgerald MP, Geest KD, White N, Smith BJ , Domann FE	Roy J. and Lucille A. Carver College of Medicine and the College of Public Health Research Week, Iowa City, IA
2005	Radiographic and Endoscopic Measurement of Esophageal Length in Pediatric Patients. Yang GS*, Bishop W, Smith BJ , Goudy S, Bauman NM	The American Broncho-Esophago-logical Association 2005 Meeting, Boca Raton, FL.
2005	Statistical Issues in the Study of Residential Radon. Smith BJ*	Institute of Mathematical Statistics New Researcher's Conference; Minneapolis, MN
2005	Modeling the Distribution of Environmental Radon Levels in Iowa: Combining Multiple Sources of Spatially Misaligned Data. Smith BJ*	Joint Statistical Meetings; Minneapolis, MN

2006	Influence of Pregnancy on Breast Cancer Characteristics and Receptor Status in Iowa Women. Scott-Conner CEH*, Romitti PA, Lynch CF, Smith BJ , Lal G, Wilkinson N	29 th San Antonio Breast Cancer Symposium; San Antonio, TX
2006	Geostatistical Hierarchical Model for Temporally Integrated Data Measured with Error. Smith BJ *	Eastern North American Region of the International Biometry Society; Tampa, FL
2006	Variation in Yearly Residential Radon Concentrations in the Upper Midwest (Poster; 3 rd Place in Biological & Health Sciences). Zhang Z*, Field RW, Smith BJ , Steck BJ	University of Iowa James F. Jakobsen Graduate Student Conference 2006
2006	Variation in Yearly Residential Radon Concentrations in the Upper Midwest (Poster). Zhang Z*, Field RW, Smith BJ , Steck BJ	Carver College of Medicine and the College of Public Health Research Week, University of Iowa, Iowa City, IA
2006	Venous Thromboembolic Events and Survival in Cervical Carcinoma (Poster). Lampli J*, Jacobson G, Smith B , Goodheart MJ	Carver College of Medicine Research Week, University of Iowa, Iowa City, IA
2006	Geostatistical Hierarchical Model for Temporally Integrated Radon Measurements (Poster). Smith BJ *, Oleson JJ	American Statistical Association Conference on Radiation and Health, Pacific Grove, CA
2007	Optimal Adaptive Group Sequential Design for Phase II Clinical Trials: A Bayesian Decision Theoretical Approach (Poster). Chen Y*, Smith BJ	Midwest Biopharmaceutical Statistics Workshop, Ball State University, Muncie, IN
2007	Computing for Bayesian Spatial Estimation and Prediction with Application to Residential Radon. Cowles K*, Smith BJ , Yan J	DIMACS Workshop on Markov Chain Monte Carlo: Synthesizing Theory and Practice, Rutgers University, Piscataway, NJ

* Conference presenter.

Visiting Professorships
Year Location
 None

E. Pending Information (grant proposals, book contracts, submitted publications etc.)

Grants

Title Source P.I.	% Effort %Salary Support	Direct Funds Period of Funding
Multidisciplinary Clinical Research Career Development Program National Institutes of Health RFA-RM-04-006 PI: Gary Hunninghake Mentor: Brian J. Smith Serve as a mentor to support the early career development of clinical researchers from a variety of disciplines engaged in all types of clinical research, including patient-oriented research, translational research, small- and large-scale clinical investigation and trials, and epidemiologic and natural history studies.	0% Effort 0% Salary	
Bayesian Geostatistical Tools for Large Datasets with Application to Indoor Radon National Institutes of Health PAR-07-344 PI: Brian J. Smith The specific aims of this project are to (1) develop methodologies and computational tools to expand the classes of geostatistical models that can be applied to large spatiotemporal datasets, (2) parallelize geostatistical tools for scalability on emerging computing technologies, and (3) apply tools for a joint spatial analysis of three large residential radon datasets.	30% Effort 30% Salary	April 2008 – March 2011
Project LEAGS: Extending Cyberinfrastructure to Facilitate Education in the Geospatial Sciences National Science Foundation 0753194 PI: Marc Armstrong The purpose of this project is to educate a new generation of students about cyberinfrastructure principles as they are applied to the use of mobile computing, parallel and distributed geoprocessing, and spatial analysis for the advancement of geospatial sciences.	4.2% Effort 4.2% Salary	September 2008 – August 2010

Publications (submitted articles, including name of journal submitted to. In- press articles would go under publications section)

1. Calva-Cerqueira D, **Smith BJ**, Hostetler ML, Lal G, Menda Y, O'Dorisio TM, Howe JR. Minimally Invasive Parathyroidectomy and Preoperative MIBI Scans: Correlation of Gland Weight and Preoperative PTH with MIBI Scans. (Submitted to Journal of the American College of Surgeons, 2006)
2. DeArmond DT, DeYoung BR, Krochmal JD, Smith BJ, Kernstine KH, Oberley LW. HIF-1 α Expression Correlates With Cell Proliferation, Metastasis, And Decreased Survival In Non-Small Cell Lung Cancer. (Submitted to Human Pathology, 2006)
3. Pramanik RK, Jacobson GM, Rose S, **Smith BJ**. Carcinosarcoma of the Uterus: Analysis of Pathological Variables, Patterns of Failure, and Treatment Outcome. (Submitted to Radiology, 2006)
4. Weydert CJ, Zhang Y, Sun W, Waugh TA, Andringa KK, Spitz DR, Ritchie JM, **Smith BJ**, Oberley LW. Increased Oxidative Stress Created by Adenoviral MnSOD or CuZnSOD plus BCNU Inhibits Breast Cancer Cell Growth. (Submitted to Molecular Cancer Therapeutics, 2006)
5. Adam, LA, **Smith BJ**, Calva-Cerqueira D, Howe JR, Lal G. Limited neck exploration in young adults with apparently sporadic primary hyperparathyroidism. (Submitted to World Journal of Surgery, 2007).
6. Chen Y, **Smith BJ**. Optimal Adaptive Group Sequential Design for Phase II Clinical Trials: A Bayesian Theoretic Approach. (Submitted to Biometrics, 2007).
7. Dennis LK, VanBeek MJ, Beane Freeman LE, Smith B, Dawson DV. Sunburns and Risk of Melanoma, Does Age Matter: A Comprehensive Meta-analysis. (Submitted to Epidemiology, 2007).
8. Gregory DJ, Chrischilles EA, Farris KB, Kohatsu ND, Lynch CF, **Smith BJ**. Beliefs about Prostate-Specific Antigen Screening among Iowa Men. (Submitted to American Journal of Preventive Medicine, 2007)
9. Lal G, Padmanabha L, Nicholson R, **Smith BJ**, Zhang L, Howe JR, Robinson RA, O'Dorisio S. ECM1 Expression in Thyroid Tumors - A Comparison of Real-Time RT-PCR and Immunohistochemistry. (Submitted to Journal of Surgical Research, 2007).
10. Luthe G, Boy RG, Jacobus J, Smith BJ, Rahaman A, Robertson LW, and Ludewig G. Xenobiotic Geometry and Media pH Determine Cytotoxicity through Solubility. (Submitted to Chemical Research in Toxicology, 2007).
11. Mazumdar S, Rushton G, **Smith BJ**, Zimmerman D, Donham KJ. Geocoding Accuracy and the Recovery of Relationships between Environmental Exposures and Health. (Submitted to International Journal of Health Geographics, 2007).

12. Simons AL, Fath MA, Mattson DM, **Smith BJ**, Walsh SA, Graham MM, Hichwa RD, Buatti JM, Dornfeld K, Spitz DR. Enhanced Response of Human Head and Neck Cancer Xenograft Tumors to Cisplatin Combined with 2-deoxy-D-glucose Correlates with Increased 18F-FDG Uptake as Determined by PET Imaging. (Submitted to International Journal of Radiation Oncology, Biology, Physics, 2007).
13. van de Wetering CI, Coleman MC, Spitz DR, **Smith BJ**, Knudson M. Manganese Superoxide Dismutase Gene Dosage Affects Chromosomal Instability and Tumor Onset in a Mouse Model of T Cell Lymphoma. (Submitted to Cancer Research, 2007).

IV. SERVICE

A. Offices/appointments held in professional organizations (least to most recent)

1. Editorships

<u>Year</u>	<u>Publication</u>
None	

2. Review Panels

<u>Year</u>	<u>Title</u>
2004	U.S. EPA Grant Review Panel for Environmental Statistics Research: Novel Analyses of Human Exposure Related Data

3. Departmental, Collegiate or University Service Positions

<u>Year</u>	<u>Position</u>
2002-03	Biostatistics Department Website Committee
2002-06	Admissions Committee for the Clinical Investigation MPH Focus Area
2003-04	CPH Continuing Education and Seminar Committee
2003-04	CPH Academic Misconduct Review Committee
2003-07	Biostatistics Graduate Admissions & Recruiting Committee
2003-05	Biostatistics Seminar Committee, Chair Fall 2004
2004-05	CPH Faculty Council (1-yr appointment)
2004-05	Biostatistics MPH Curriculum Committee
2005-07	Biostatistics Computing Committee, Chair 2006-07
2006-07	University of Iowa James F. Jakobsen Conference Judge
2006-07	Biostatistics Social Event Committee

2007	University of Iowa Center for Global and Regional Environmental Research Seed Grant Reviewer
2007-08	Biostatistics MS and PhD Curriculum Committee
2007-08	Biostatistics Departmental Self-Study Committee
2007-08	CPH Computation and Informatics Commttee

4. *Professional Organizations (state and/or national)*

<u>Year</u>	<u>Organization</u>	<u>Position</u>
1992-	Phi Beta Kappa	Member
1999-	American Statistical Association	Member
2001-	Eastern North American Region of the International Biometric Society	Member
2002-2006	American Mathematical Association	Member

B. Other Professional Service

1. *Referee Manuscripts*

<u>Year</u>	<u>Title</u>
1998-99	<u>Health Physics and Journal of Agricultural, Biological, and Environmental Statistics</u>
2001	<u>Journal of Toxicology & Environmental Health, Statistical Computing</u>
2002	<u>Health Physics, Statistics in Medicine</u>
2003	<u>Statistics in Medicine, Statistics and Computing</u>
2004	<u>Journal of Clinical Oncology</u>
2005	<u>Environmental and Ecological Statistics</u>
2006	<u>Environmental Health Perspectives</u>
2007	<u>Circulation, Journal of Clinical Oncology</u>

2. *Organize Conference, Paper Session, etc.*

<u>Year</u>	<u>Title</u>
2005	Session Chair for "Monitoring and Modeling Air Quality and its Health Effects". Joint Statistical Meetings, Minneapolis, MN.

3. *Departmental, Collegiate or University Committees (other than teaching)*
- | <u>Year</u> | <u>Title</u> |
|-------------|--|
| 2001- | Biostatistics Core of the Holden Comprehensive Cancer Center, member |
| 2001- | Holden Comprehensive Cancer Center Protocol Review and Monitoring Committee, member |
| 2002-04 | Statistical Consultant to the Center for Health Effects and Environmental Contaminants (CHEEC) |
| 2004- | Holden Comprehensive Cancer Center Cancer Epidemiology Program, member |
| 2006- | Holden Comprehensive Cancer Center Data Safety and Monitoring Committee, member |
4. *State or National Committees*
- | <u>Year</u> | <u>Title</u> |
|-------------|--------------|
| None | |
5. *Professionally Relevant Community Involvement*
- | <u>Year</u> | <u>Activity</u> |
|-------------|-----------------|
| None | |
6. *Professional Consulting*
- | <u>Year</u> | <u>Organization</u> | <u>Role</u> |
|-------------|---------------------|-------------|
| None | | |
7. *Other*
- | <u>Year</u> | <u>Activity</u> |
|-------------|-----------------|
| None | |

C. Clinical assignments since last promotion (if applicable)

<u>Year</u>	<u>Area</u>	<u># Per Year</u>
N/A		