

June, 2004

**CURRICULUM VITAE****A. Personal Information:**

Name in Full	Kiros Teghegne Berhane, Ph.D.
Business Address	University of Southern California Dept. of Preventive Medicine 1540 Alcazar Street, CHP 220 Los Angeles, CA 90089
Business Phone	(323) 442-1994
FAX	(323) 442-2349
E-mail Address	kiros@usc.edu
Home Address	1736 Vistillas Rd. Altadena, CA 91001
Home Phone	(626) 345-9667
Place of Birth	Ethiopia
Citizenship	Ethiopian (US Permanent Resident)

**B. Education:**

High School	Asmara Comprehensive Secondary School, Asmara, Eritrea, 1982
College or University	Addis Ababa University, Addis Ababa, Ethiopia, B.Sc. (Statistics), 1986 International Centre for Pure & Applied Mathematics, Nice France, Certificate, 1988 [Summer School] University of Guelph, Guelph, Canada, M.Sc (Statistics), 1991 University of Toronto, Toronto, Canada Ph.D. (Biostatistics), 1994 Thesis Advisor: Rob Tibshirani, Ph.D.
Fellowship	Johns Hopkins University, Department of Biostatistics, Postdoctoral fellowship Supervisor: Scott Zeger, Ph.D.
Honors and Awards	Very Great Distinction ("Summa Cum Laude") Ethiopian School Leaving Certificate Examination GPA: 4.0/4.0 , 1982

Dean's List, Addis Ababa University  
Addis Ababa, Ethiopia, 12/82 - 6/86  
Semester Awards, University of Guelph  
Guelph, Canada, 1/90, 9/90, 9/89  
Whitehall-Robbins Fellowship,  
University of Toronto  
Toronto, Canada, 9/91-8/92, 9/92-8/93  
Open Fellowship, University of Toronto  
Toronto, Canada, 9/93 - 8/94  
ENAR Student Award, ENAR Biometrics  
Conference, Cleveland, OH, 4/93  
Graduate Bursary, University of Toronto,  
Toronto, Canada, 9/94

**C. Professional Background:**

Academic appointments

Graduate Assistant, Department of Basic Sciences,  
Ambo College of Agriculture, Ambo, Ethiopia, 1986-1987  
Lecturer, Department of Mathematics,  
Asmara University, Asmara, Eritrea, 1987-1989  
Assistant Professor, Department of Biostatistics,  
University of Pittsburgh, 1995-1997 [Secondary]  
Assistant Professor, Department of Family Medicine &  
Clinical Epidemiology, University of Pittsburgh, 1995-1997  
Visiting Assistant Professor of Preventive Medicine,  
University of Southern California, 12/97 – 01/00  
Assistant Professor of Preventive Medicine,  
University of Southern California, 02/00 – 05/04  
Associate Professor of Preventive Medicine,  
University of Southern California, 06/04 - Present

Specific teaching responsibilities

Courses: Introductory Mathematics, Biometry for Plant Science  
Basic Sciences Department, Ambo Junior College of Agriculture,  
Ambo, Ethiopia, 10/86 - 8/87  
Courses: Quantitative Methods II, Introduction to Statistics, Statistical  
Methods I and II, Introduction to Biometry  
Statistics Unit, Department of Mathematics, Asmara University,  
Asmara, Eritrea, 9/87 - 8/89  
Courses: Statistical Methods (I, II, III), Statistical Methods for  
Animal Science, Discrete Mathematics

Department of Mathematics & Statistics, University of Guelph, Guelph, Canada,  
9/89 - 8/91 [Teaching Assistant]

Courses: Introductory Biostatistics, Modern Regression Techniques Department of  
Statistics, and Department of Preventive Medicine & Biostatistics, School of  
Medicine, University of Toronto, Toronto, Canada, 9/91 - 12/93 [Teaching  
Assistant]

Graduate Course: Modern Non-parametric Regression Techniques  
(4th Quarter, 1994-1995)

Department of Biostatistics, School of Hygiene and Public Health,  
Johns Hopkins University, Baltimore, MA. 3/95 - 5/95

Graduate Course: Modern Non-parametric Regression Techniques (97-3)

Department of Biostatistics, Graduate School of Public Health, University of  
Pittsburgh, Pittsburgh, PA, 5/97-6/97

Course: Clinical Epidemiology and Biostatistics

Department of Family Medicine and Clinical Epidemiology,  
School of Medicine, University of Pittsburgh, Pittsburgh,  
PA, 9/96-12/96 [PBL Discussion Leader]

Guest Lecturer (Lecture on Smoothing Techniques)

Graduate Course: Discrete Multivariate Analysis

Department of Biostatistics, Graduate School of Public Health, University of  
Pittsburgh, Pittsburgh, PA, March 25/97

Course: Introduction to the Theory of Biometry Principles (PM 522a)

Graduate Program in Biometry, USC (Fall 1998, Fall 1999, Fall 2000, Fall 2001)

Course: 3<sup>rd</sup> Year Medical Student's course on Preventive Medicine

USC Medical School, Small Group Teaching (Spring 1999-2002)

Course: Independent Study on Modern Regression Techniques (PM 790)

Graduate Program in Biometry, USC (Summer 1999) [Talat Islam]

Course: Independent Study on Modern Regression Techniques (PM 790)

Graduate Program in Biometry, USC (Summer 2002, Fall 2002) [Nuoo-Ting  
Molitor]

Specific administrative responsibilities (school or university committees)

Student Seminar Series Co-ordinator

Department of Preventive Medicine and Biostatistics,  
University of Toronto, Toronto, Canada, 1993 - 1994

Member, Departmental Award Committee

Department of Family Medicine and Clinical Epidemiology  
University of Pittsburgh, Pittsburgh, PA, 1996 - 1998

Member, Faculty Search Committee

Department of Biostatistics, Graduate School of Public Health  
University of Pittsburgh, Pittsburgh, PA, 1996 - 1997

Member, Ph.D. Dissertation Committee

Student: Joyce Ho (Supervisor: Lisa Weissfeld),  
Department of Biostatistics, University of Pittsburgh, 1996-1997

Member, Curriculum Committee

Division of Biometry, Department of Preventive Medicine  
University of Southern California, Los Angeles, CA, 1998 - Present

Member, M.Sc. Thesis Committee

Student: Amy Fan (Supervisor: James Dwyer),  
Topic: "The Longitudinal Study of Cigarette Smoking Growth from Adolescence to Adulthood using Latent Variable Modeling"  
Graduate Program in Applied Biometry/Epidemiology

Co-supervisor, M.Sc. Thesis Committee

Student: Yu-Fen Li (Co-supervisor: Frank Gilliland),  
Topic: "The effect of maternal smoking during pregnancy and environmental tobacco smoke exposure on childhood lung function"  
Graduate Program in Applied Biometry/Epidemiology

Chair, Ph.D. Screening Examination Committee

Division of Biometry, Department of Preventive Medicine  
University of Southern California, Los Angeles, CA, 1999

Co-supervisor, M.Sc. Thesis Committee

Student: Xiaowei Liu (Co-supervisor: Frank Gilliland),  
Topic: "Chronic effects of air pollution on School Absenteeism"  
Graduate Program in Applied Biometry/Epidemiology (2001)

Member, M.Sc. Thesis Committee

Student: Rui Li (Supervisor: Frank Gilliland)  
Topic: "Family history, hormone replacement therapy and breast cancer risk in hispanic and non-hispanic women, The New Mexico Women's Health Study"  
Graduate Program in Applied Biometry/Epidemiology (2001)

Member, M.Sc. Thesis Committee

Student: Josh Millestein (Supervisor: Frank Gilliland)  
Topic: "Effects of ambient air pollution on monthly wheeze and asthma exacerbation in school children"  
Graduate Program in Applied Biometry/Epidemiology (2002)

Member, M.Sc. Thesis Committee

Student: Lisa Giltner Grossman (Supervisor: Frank Gilliland)  
Topic: "A descriptive analysis of medication use by asthmatics in the Children's Health Study"  
Graduate Program in Applied Biometry/Epidemiology (2003)

Faculty Supervisor, M.PH. Project

Student: Rebecca Sokol, MD  
Topic: "Effects of air pollution on male fertility"  
Graduate Program in Public Health (2002)

Member, M.Sc. Thesis Committee

Student: Ling Yao (Supervisor: Daniel Stram)  
Topic: "**Data analysis on human exposure to concentrated particle sulphur**"

Graduate Program in Applied Biometry/Epidemiology

Chair, Ph.D. Dissertation

Student: Nuoo-Ting Molitor

Topic: "Flexible models for multiple longitudinal outcomes"

Graduate Program in Biometry

Military service

None

Other employment or activity

Research Assistant, Newton Ashton Statistical Laboratory

University of Guelph, Guelph, Canada, 6/91-8/91

Statistical Consultant, Research Services Unit

University of Toronto, Toronto, Canada, 7/92-10/94

Session Chair at SSC Annual Conference, Banff,

Alberta, Canada - 1994

Referee for the Journal of American Statistical Association

(Theory and Methods) –1996

Referee for the Journal of Computational Statistics and

Data Analysis - 1996.

Referee for the Canadian Journal of Statistics - 1996

Grant Reviewer for Nation Science Foundation

(US Civilian Research and Development Foundation) - 1997

Referee for American Journal of Epidemiology - 1998

Referee for Statistics in Medicine - 1998

Referee for American Journal of Epidemiology – 1999

Referee for Biometrics – 1999

Data Session Leader on Longitudinal Data, Workshop on smoothing

Applications, University of British Columbia, Canada – June 1999

Referee for American Journal of Epidemiology - 2000

Referee for Statistics in Medicine – 2000

Referee for Biostatistics - 2000

Referee for Biostatistics – 2001

Referee for American Journal of Epidemiology – 2001

Referee for Epidemiology – 2001

Referee for Computational Statistics and Data Analysis – 2001

Referee for Statistics in Medicine – 2002

Referee for American Journal of Epidemiology – 2002

Referee for Epidemiology – 2002  
Referee for Biostatistics – 2002  
Referee for Annals of Epidemiology – 2003  
Referee for American Journal of Epidemiology – 2003  
Referee for Epidemiology - 2003

Invited talks and presentations

ENAR Biometrics Conference (Student Award winning talk)  
Annual Conference of Statistical Society of Canada, Banff, Canada  
(Invited talk and session chair), 1994  
CAMACS and Department of Biostatistics, Johns Hopkins University, Baltimore, MD  
Department of Statistics and Actuarial Science, University of Waterloo, Canada  
GLM Special Topics Conference. Institute of Mathematical Statistics, Gainesville, FL  
(Invited Talk), 1994  
Department of Biostatistics, Johns Hopkins University, Baltimore, MD, 1995  
Department of Mathematics and Statistics, University of Maryland Baltimore County,  
Baltimore, MD, 1995  
Department of Biometry, SUNY at Albany, Albany, NY, 1995  
Center for Biostatistics and Epidemiology, Hershey Medical Center, Hershey, PA, 1995  
Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA, 1995  
Department of Statistics, George Washington University, Washington, DC, 1995  
Joint Statistical Meetings, Orlando, FL, 1996  
Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA, 1996  
International Biometrics Conference, Amsterdam, Holland, 1996  
Department of Biostatistics and Epidemiology, Cleveland Clinic Foundation, Cleveland,  
OH, 1996  
Department of Mathematics and Statistics, University of Guelph, Guelph, Canada, 1996  
Department of Statistics, University of Missouri, Columbia, MO, 1997  
Biostatistics Center, George Washington University, Rockville, MD, 1997  
Department of Preventive Medicine, University of Southern California, Los Angeles,  
CA, 1997  
ENAR Biometrics Conference, Pittsburgh, PA, 1998  
Joint Statistical Meetings, Dallas, TX, 1998  
HEI/USC Epi/Exposure Workshop, Pasadena, CA, 1998  
EPA sponsored Particle Epidemiology Workshop, Seattle, WA, 1998  
NRCSE, University of Washington, Seattle, WA, 1998  
Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA, 1998  
WIP, Department of Preventive Medicine, USC, Los Angeles, CA, 1999  
Workshop on smoothing techniques (session leader on longitudinal data),  
University of British Columbia, Vancouver, CANADA, 1999  
Joint Statistical Meetings, Baltimore, MD, 1999  
Joint Statistical Meetings, Indianapolis, ID, 2000  
Annual Meeting of International Society for Environmental  
Epidemiology, Buffalo, NY, 2000

Joint Statistical Meetings, Atlanta, GA, 2001  
Joint Statistical Meetings, New York, NY, 2002  
Department of Mathematics and Statistics, University of Guelph, Canada, March 2003  
Department of Biostatistics, UCLA, May 2003

**D. Committee and Society Memberships:**

**Committee**

Member, Committee to review the health effects in Vietnam veterans of exposure to herbicides (Fourth Biennial Update)  
**National Academy of Sciences, Washington, DC**  
Member, NMMAPS and Other Revised Analysis Review Panel,  
**Health Effects Institute, Boston, MA**  
Member, Scientific Advisory Panel,  
**Western Interprovincial Scientific Studies Association (WISSA),  
Calgary, Canada**  
Western Canada Study on Animal and Human Health Effects Associated with Exposure to Emissions from Oil and Natural Gas Field Facilities

**Societies**

Member, American Statistical Association, 1991 -  
Member, International Biometrics Society (ENAR), 1994 - 1996  
Member, International Biometrics Society (WNAR), 1998 -  
Member, Ethiopian Statistical Association, 1999 –  
Vice-president, Statistical Society of Ethiopians  
in North America (SSENA), 2000-2002  
President, Statistical Society of Ethiopians  
in North America (SSENA), 2002-2004

**E. Consultantship:**

Local  
Consultant, Rancho Los Amigos Medical Center

**F. Research Activities:**

Complete Bibliography  
Appended

Major Areas of Research Interest

Longitudinal/time series data analysis, Flexible modeling techniques,  
Modeling time-to-event data, Latency, Applications to Environmental Epidemiology,

## Applications to Cancer, Applications to AIDS

## Research Grants – Principal Investigator

- |  |              |
|--|--------------|
| 1. Innovative Statistical Approaches to Modeling Multiple Outcome Data from the NSABP-BCPT Subcontract from University of Pittsburgh (from US Department of Defense) 1999-2002   | \$106,429    |
| 2. National Institutes of Environmental Health Sciences Statistical Methods for Environmental and Genetic Research (in P01: Genetics, Air Pollution and Respiratory Effects in Children and Young Adults [PI of P01: John Peters, MD]) | \$19,414,770 |
| 3. National Institute of Health [Pending – to be resubmitted] Statistical Methods for Behavioral Intervention Data (Subcontract from University of Pittsburgh) (2003-2006)   | \$351,427    |

## Research Grants – Co-Investigator

- |   |              |
|---|--------------|
| 1. Epidemiologic Investigation to Identify Chronic Effects of Ambient Air Pollutants in Southern California California Air Resources Board 1995-2002  | \$6,015,941  |
| 2. National Institutes of Environmental Health Sciences Environmental Exposures, Host Factors and Human Disease (Biostatistics Service Core) 1996-2001                                      | \$59,858/yr  |
| 3. Environmental Protection Agency/ National Institutes of Health Children's Center – Respiratory Disease and Prevention Community Based Childhood Asthma Prevention/Intervention 1998-2003 | \$902,802/yr |

Curriculum Vitae

Kiros Teghegne Berhane, Ph.D.

- |   |                |
|---|----------------|
| 4. Southern California Women's Interagency<br>NIAID/NIH<br>HIV Study Consortium (WIHS)<br>1997-2002 | \$1,258,336/yr |
| 5. Time Related Factors in Cancer Epidemiology<br>NCI<br>1999-2003                                  | \$ 233,128/yr  |

**BIBLIOGRAPHY**

## PEER REVIEW

(Note: items with asterisks are papers by supervised students)

1. Al-Sayyed A, Deporter DA, Pillair RM, Watson PA, Pharoah M, **Berhane K**, Carter S. Predictable crest bone remodeling around two porous-coated titanium alloy dental implant designs: A radiographic study in dogs. *Clinical Oral Implant Research* 5:131-141, 1994.
2. Becker S, **Berhane K**. A meta analysis of 61 sperm count studies revisited. *Fertility and Sterility* 67(6):1103-1108, 1997.
3. Kimm SYS, Barton BA, **Berhane K**, Ross JW, Payne GH, Schreiber GB. Self-esteem and adiposity in black and white girls: The NHLBI Growth and Health Study (NGHS). *Annals of Epidemiology* 7:550-560, 1997.
4. **Berhane K**, Tibshirani RJ. Generalized additive models for longitudinal data. *Canadian Journal of Statistics* 26(4):517-535, 1998.
5. **Berhane K**, Rao JS. Automatic smoothing parameter selection in nonparametric models for longitudinal data. *Journal of Applied Stochastic Models and Data Analysis* 13:289-296, 1998.
6. McConnell R, **Berhane K**, Gilliland F, London SJ, Vora H, Avol E, Gauderman WJ, Lurmann F, Thomas DC, Peters JM. Air pollution and bronchitic symptoms in Southern California children with asthma. *Environmental Health Perspectives* Vol. 107 9:757-760, 1999.
7. Linn WS, Szlachcic Y, Gong H, Kinney PL, **Berhane K**. Air pollution and daily hospital admissions in metropolitan Los Angeles. *Environmental Health Perspectives* 108(5):427-434, 2000.
8. Gilliland FD, **Berhane K**, McConnell R, Rappaport E, Vora H, Avol E, Peters J. Maternal smoking during pregnancy, environmental tobacco smoke exposure and childhood lung function. *Thorax* 55:271-276, 2000.

9. **Berhane K**, Thomas DC.  
Discussion on “Combining evidence on air pollution and daily mortality from the 20 largest US cities: a hierarchical modeling strategy”.  
Journal of the Royal Statistical Society, Series A 163(3):263-302, 2000.
10. Gauderman WJ, McConnell R, Gilliland F, London S, Thomas D, Avol E, **Berhane K**, Rappaport E, Lurmann F, Margolis H, Peters J.  
Association between air pollution and pulmonary function growth in Southern-California school-aged children.  
American Journal for Respiratory Care Medicine 162(4):1-8, 2000.
11. **Berhane K**, McConnell R, Gilliland F, Islam T, Gauderman WJ, Avol E, London S, Rappaport E, Margolis HG, Peters JM.  
Sex-specific effects of asthma on pulmonary function in children.  
American Journal for Respiratory Care Medicine 162(5):1723-1730, 2000.
12. AM Levine, **K Berhane**, L Masri-Lavine, ML Sanchez, R Greenblatt, K Anastos, M Young, M Augenbaum, M Cohen, S Gange, D Burns.  
Prevalence of and risk factors for anemia among a large cohort of HIV infected women: women's interagency HIV study (WIHS). Journal of AIDS 26:28-35, 2001.
13. Gilliland FD, **Berhane K**, Rappaport E, Thomas DC, Avol E, Islam T, et al.  
The effects of ambient air pollution on school absenteeism due to respiratory illnesses.  
Epidemiology 12:43-54, 2001.
- 14.\* Li YF, Gilliland FD, **Berhane KT**, McConnell R, Gauderman WJ, Rappaport EB, Peters JM.  
Effects of In Utero and environmental tobacco smoke exposure on lung function in boys and girls with asthma.  
American Journal for Respiratory Care Medicine 162:2097-2104, 2000.
15. Hauptmann M, **Berhane K**, Langholz B, Lubin JH  
Using splines to analyze latency in the Colorado plateau uranium miners cohort.  
Journal of Epidemiology and Biostatistics, 6: 417-424, 2001.
16. McConnell R, **Berhane K**, Gilliland F, Islam T, London SJ, Gauderman WJ, Avol E, Margolis HG, Peters JM. Sports and asthma in children exposed to ozone. Lancet 359 (February 2):386-391, 2002.
17. Gilliland FD, **Berhane K**, Li Y-F, Kim DH, Margolis HG. Dietary magnesium, potassium, sodium and children’s lung function. Am J Epidemiol 155(2):1-7, 2002.

18. **Berhane K**, Thomas DC.  
A two-stage model for time series data of counts from many sites.  
Biostatistics, Vol 3 (1); 21-32, 2002.
19. McConnell R, **Berhane K**, Gilliland F, Islam T, Avol E, London S, Gauderman WJ, Margolis HG, Thomas DC, Peters JM.  
Indoor risk factors for asthma in a cohort of adolescents.  
Epidemiology, 13(3); 288-295, 2002.
20. Gauderman WJ, Gilliland FD, Avol E, Vora H, Thomas DT, Rappaport E, **Berhane K**, Lurmann F, McConnell R, Stram D, Peters JM.  
Association between air pollution and lung function growth in Southern California children: Results from a Second Cohort.  
Am J Respir Crit Care Med, 166(1); 74-84, 2002.
21. Gilliland FD, Rappaport E, **Berhane K**, Islam T, Dubeau L, Peters JM.  
Effects of Glutathione *S*-Transferase P1, M1, and T1 on Respiratory Illnesses in Children  
Am J Respir Crit Care Med, 166(3); 346-351, 2002.
22. Gilliland FD, Li Y-F, Dubeau L, **Berhane K**, Avol E, McConnell R, Gauderman WJ, Peters JM.  
Effects of GST M1, maternal smoking during pregnancy, and environmental tobacco smoke on asthma and wheezing in children.  
Am J Respir Crit Care Med, 166(4); 457-463, 2002.
23. Gilliland FD, **Berhane K**, Li Y-F, Rappaport EB, Peters JM  
Effects of early onset asthma and in utero exposure to maternal smoking on childhood lung function.  
Am J Respir Crit Care Med, 167: 917-924, 2003.
24. Gilliland FD, **Berhane K**, Islam T, Wenten M, Rappaport E, Avol E, Gauderman WJ, McConnell R, Peters JM.  
Environmental tobacco smoke and absenteeism related to respiratory illness in schoolchildren.  
American Journal of Epidemiology, 157: 861-869, 2003.
25. **Berhane K**, Weissfeld L.  
Inference in spline based models for multiple time-to-event data, with applications to a breast cancer prevention trial.  
Biometrics 59: 859-868, 2003.
26. McConnell R, **Berhane K**, Gilliland F, Molitor J, Thomas D, Lurmann F, Avol E, Gauderman WJ, Peters JM.

- Prospective study of air pollution and bronchitic symptoms in children with asthma.  
Am J Respir Crit Care Med 168: 790-797, 2003.
27. Gilliland FD, **Berhane K**, Islam T, et al. Obesity and the Risk of Newly Diagnosed Asthma in School-age Children.  
Am J Epidemiol 158:406-15, 2003.
  28. Gilliland FD, **Berhane K**, Li YF, Gauderman WJ, McConnell R, Peters J. Children's lung function and antioxidant vitamin, fruit, juice, and vegetable intake.  
Am J Epidemiol 158:576-84, 2003.
  29. McConnel R, Jones C, Milam J, Gonzalez P, **Berhane K**, Clement L, Richardson J, Hanley-Lopez J, Kwong K, Malouf N, Cahero J, Platts-Mills T. Cockroach counts and house dust allergen concentrations after professional cockroach control and cleaning  
Annals of Allergy Asthma, and Immunology 91:546-552, 2003.

## IN PRESS

1. **Berhane K**, Gauderman WJ, Stram DO, Thomas DC  
Statistical issues in studies of the long term effects of air pollution: The Southern California Children's Health Study. (*with discussion*)  
Statistical Science
2. Rondeau V, **Berhane K**, Thomas DC.  
A three-level model for binary time series data: The effects of air pollution in the Southern California Children's Health Study  
Statistics in Medicine (conditionally accepted for publication)
3. **Berhane K**, Karim R, Cohen MH, Masri-Lavine L, Young M, Anastos K, Augenbaum M, Heather Watts D, Levine AM. Impact of highly active anti-retroviral therapy (HAART) on anemia and survival in a large cohort of HIV infected women: Women's Interagency HIV Study (WIHS).  
JAIDS
4. Gauderman WJ, Avol E, Gilliland F, Vora H, Thomas D, **Berhane K**, McConnell R, Kuenzli N, Lurmann F, Rappaport E, Bates D, Peters JM.  
The effect of air pollution on lung function development in children aged 10 to 18 years.  
New England Journal of Medicine.

## ARTICLES SUBMITTED

1. **Berhane K**, Hauptmann M, Langholz B  
Using Tensor Product Splines in Modeling Exposure-Time-Response Relationships:  
With application to Colorado Plateau Uranium Miners Data.  
Biometrics.
- 2.\* Millstein J, Gilliland F., **Berhane K**, Gauderman WJ, McConnell R, Avol E,  
Rappaport EB, Peters J,  
Effects of ambient air pollution on monthly wheeze and asthma exacerbation in school  
children.  
Submitted to Am J Respir Crit Care Med
3. Gilliland FD, Rappaport E, **Berhane K**, Islam T, Dubeau L, Gauderman WJ,  
McConnell R.  
Effects of Glutathione S -Transferase P1, M1, and T1 on acute respiratory illnesses in  
children.
4. Gilliland FD, Gauderman WJ, Vora H, **Berhane K**, McConnell R, Rappaport EB,  
Avol E, Peters JM.  
Growth effects of Glutathione-S-Transferase (GST) M1, GSTT1, and GSTP1 genotypes  
on childhood lung function.
- 5.\* Sokol RZ, Kraft P, Fowler IM, Kim E, **Berhane K**  
Effects of ambient air quality on semen quality  
Submitted to American Journal of Epidemiology.
6. McConnell R, Milam J, Richardson J, Galvan J, Jones C, Thorne P, **Berhane K**.  
Educational intervention to control cockroach allergen exposure in the homes of hispanic  
children in Los Angeles: Results of the La Casa Study.  
JACI
7. McConnel R, **Berhane K**, Yao L, Lurmann FW, Avol E, Peters JM.  
Variation in residential ozone with nearby traffic.

## ARTICLES IN PREPARATION

1. Gilliland FD, T Islam, **Berhane K**, WJ Gauderman, et al. GSTP1, sports, and incident  
asthma in schoolchildren.
2. **Berhane K**, Molitor N-T, *et al.* A Bayesian approach to functional based multi level  
modeling of longitudinal data: With applications to environmental epidemiology.
3. Thomas DC, DV Conti, J Molitor, WJ Gauderman, **Berhane K**, F Gilliland, et al.  
Modelselection, model averaging, and the use of prior covariates in the investigation of

- the health effects of multiple air pollutants.
4. **Berhane K**, Weissfeld L. On the use of Pseudosplines in modeling multivariate survival data: With applications to the NASBP-BCPT.
  5. McConnell R, **Berhane K**, Yao L, Lurmann FW, Avol E, Peters JM. Variation in residential ozone with nearby traffic.
  6. **Berhane K**. Linear functional based multi-level models for longitudinal data: A prediction based approach
  7. **Berhane K**, et al. 8-year data analysis of sex-specific effects of asthma on lung function in children.

## NON PEER REVIEW, TECHNICAL REPORTS

1. **Berhane K**, Carter EM, Hubert JJ, Allen OB.  
Longitudinal data analysis by generalized estimating equations.  
Statistical Series No. 1991-234, Department of Mathematics and Statistics, University of Guelph 1991.
2. **Berhane K**, Tibshirani RJ.  
Generalized additive models for longitudinal data.  
Technical Report No. 9311, Department of Statistics, University of Toronto, 1993.
3. Samet JM, Zeger SL, **Berhane K**.  
The association of mortality and particulate air pollution. The Phase I Report of the Particulate Epidemiology Evaluation Project.  
Health Effects Institute 1-104, August 1995.
4. **Berhane K**, Rao JS.  
Automatic smoothing parameter selection in nonparametric models for longitudinal data. Proceedings of the Seventh International Symposium on Applied Stochastic Models and Data Analysis. Dublin, Ireland, June 12-15, 1995: 22-34.
5. Rao JS, **Berhane K**.  
A physician's guide to some modern statistical tools for the analysis of biomedical data. Technical Report Series, Department of Epidemiology and Biostatistics, Cleveland Clinic Foundation 1997.
6. Langholz B, **Berhane K**, Goldstein L, Xiang A, Thomas DC.  
Time related factors in Epidemiology: 1999 Renewal Proposal.  
Technical Report Series No. 140, Division of Biostatistics, Department of Preventive

Medicine, USC.

7. **Berhane K**, Zeger SL, Samet JM.  
Iteratively weighted and adaptive filtered least squares for Poisson time series data: Applications to air pollution studies.  
Technical Report Series No. 151, Division of Biostatistics, Department of Preventive Medicine, USC, 2000.
8. **Berhane K**, Thomas DC.  
A two-stage model for time series data of counts from many sites.  
Technical Report Series No. 152, Division of Biostatistics, Department of Preventive Medicine, USC, 2000.
9. **Berhane K**, Gauderman WJ, Stram DO, Thomas DC  
Statistical issues in studies of the long term effects of air pollution: The Southern California Childrens Health Study.  
Technical Report Series No. 156, Division of Biostatistics, Department of Preventive Medicine, USC, 2001.
10. **Berhane K**, Weissfeld L  
Inference in Spline Based Models for Multiple Time-to-Event Data: With applications to a breast cancer prevention trial.  
Technical Report Series No. 168, Division of Biostatistics, Department of Preventive Medicine, USC, 2003.
11. **Berhane K**.  
Functional based multi-level models for longitudinal data.  
Proceedings of Joint Statistical Meetings, New York, August 2002 (6 pages in CDROM)
12. **Berhane K**, (*with Irva Hertz-Picciotto*)  
Chapter on Reproductive Outcomes  
Veterans and Agent Orange: Update 2002, Washington DC: National Academy of Sciences (Release Date: January 23, 2003)
13. **Berhane K**, (*with Irva Hertz-Piccioto, Paul Engstrom, Tom Gasiewicz, Tee Guidotti, Loren Koller, John Stegman and David Strogatz*)  
Chapter on Cancer Outcomes  
Veterans and Agent Orange: Update 2002, Washington DC: National Academy of Sciences (Release Date: January 23, 2003)
14. **Berhane K**, (*with Irva Hertz-Picciotto, Paul Engstrom, Tom Gasiewicz, Tee Guidotti, Loren Koller, John Stegman and David Strogatz*)  
Veterans and Agent Orange: Presumption of Association between Exposure and Respiratory Cancer, Washington DC: National Academy of Sciences (Release Date:

February, 2004)

15. **Berhane K, Molitor N-T, et al.** A Bayesian approach to functional based multi level modeling of longitudinal data: With applications to environmental epidemiology. USC Technical Report No. 169 (2004).

## ABSTRACTS

1. **Berhane K, Tibshirani R.**  
Non-parametric regression models for longitudinal data. Presented at ENAR Biometrics Conference, 1994.  
Cleveland, Ohio (Student Award).
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