

CURRICULUM VITAE  
Yan Li, 01/2012

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**EDUCATION/TRAINING:**

Dec. 2006-July. 2008

**PostDoc**, Biostatistics Branch, Division of Cancer Epidemiology and Genetics, NCI, NIH  
Field of Study: Survey Statistics and Biostatistics  
Mentor: Dr. Barry Graubard

Jan. 2003-Dec. 2006

**Ph.D.**, University of Maryland, College Park  
Major: Survey Methodology  
Thesis Topic: Analysis of Complex Survey Data Using Model-Based and Model-Assisted Methods  
Research Advisor: Prof. Partha Lahiri

Aug. 2001-Dec. 2002

**M.S.**, University of Nebraska-Lincoln  
Major: Statistics  
Thesis Topic: Model-Based Small Area Estimation with an Application in Agriculture  
Research Advisor: Prof. Partha Lahiri

Sep. 1997-Jul. 2000

**M.S.**, China Agricultural University, China  
Major: Animal Genetics and Breeding  
Research Advisor: Prof. Changxin Wu (Member, National Academy of Science in China)

Sep. 1993-Jul. 1997

**B.S.**, Beijing Institute of Technology, China  
Major: Computer Science

**PROFESSIONAL EXPERIENCE:**

Assistant Professor at the Department of Mathematics,  
The University of Texas at Arlington  
Arlington, TX, 09/2009 – present

Visiting Assistant Professor at the Department of  
Mathematics, The University of Texas at Arlington  
Arlington, TX, 09/2008 – 08/2009

Adjunct Faculty at the Department of Clinical Science,  
UT Southwestern Medical Center  
Dallas, TX, 09/2010 – present

Research Assistant at the Joint Program for Survey  
Methodology (JPSM), University of Maryland  
College Park, MD, 01/2005 – 10/2006

Statistician at the Office of Research and Methodology,  
National Center for Health Statistics  
Hyattsville, MD, 07/2003 – 08/2005

Research and Teaching Assistant at JPSM,  
University of Maryland  
College Park, MD, 01/2003 – 07/2003

Statistician, WESTAT  
Rockville, MD, 08/2002-12/2002

Research and Teaching Assistant at the Department of  
Mathematics and Statistics, University of Nebraska-Lincoln

Lincoln, NE, 08/2001-08/2002

## RESEARCH INTERESTS:

Health survey and case-control data analysis under complex sample designs; Statistical genetics; Genetic association study; Gene-environment interactions; Missing data methods; Survival analysis of cohort studies; and Collaborative biomedical research.

## GRANT SUPPORT

Single PI,	\$142,230,	09/2011 – 08/2013
“SNP-based pseudo-semiparametric inference for the case-control studies,” NIH-U01CA159424, National Institute of Health		

Co-PI (with PI Romero in Bio-Engineering),	\$2,195,054,	11/2010 – 10/2013
“Cellular and molecular contributions to signal instability in peripheral regenerative neurointerfaces,” DARPA-BAA-10-32, Department of Energy, Defense Advanced Research Projects Agency		

Co-PI (with PI Chen in Biostatistics),	\$35,091,	04/2010 – 03/2012
“Statistical Methods in Genetic Epidemiology Research,” NIH-5R01ES016626, National Institute of Health		

Single PI	\$7,100,	05/2009 – 08/2010
“Statistical Analyses of Gene-Environment Interactions,” Research Enhancement Program, The University of Texas at Arlington		

## PUBLICATIONS

### ***Published/Accepted Peer-Reviewed Journal Paper***

1. Y. Li, M.H. Gail, D.L. Preston, B.I. Graubard, and J.H. Lubin. Piecewise Exponential Survival Times and Analysis of Case-Cohort Data. *Statistics in Medicine* (accepted).
2. C.P. Han and Y. Li. Regression Analysis with Block Missing Values and Variables Selection. *Pakistan Journal of Statistics and Operation Research* (accepted).
3. A.P. Chokkalingam, E.D. Yeboah, A. DeMarzo, G. Netto, K. Yu, R.B. Biritwum, Y. Tettey, A. Adjei, S. Jadallah, E. Platz, Y. Li, L.W. Chu, D. Chia, S. Niwa, A. Partin, I.M. Thompson, Claus Roehrborn<sup>8</sup>, Robert N. Hoover<sup>4</sup>, A.W. Hsing. Prevalence of Benign Prostatic Hyperplasia and Lower Urinary Tract Symptoms in West Africans. *Prostate Cancer and Prostatic Diseases* (accepted).
4. C.L. Ogden, Y. Li, D.S. Freedman, L. Borrud, and K.M. Flegal (2011). Smoothed percentage body fat percentiles: US children and adolescents, 1999-2004. *National Health Statistics Reports*, **43**, 1-7.
5. Y. Li and B.I. Graubard (2011), Testing for Hardy Weinberg Equilibrium in National Household Surveys that Collect Family-Based Genetic Data. *Annals of Human Genetics*, **75**, 732-41.
6. D.M. van Bommel, Y. Li, J. McLean, M.H. Chang, N.F. Dowling, B.I. Graubard, P. Rajaraman (2011), “Blood lead levels, ALAD gene polymorphisms, and mortality. *Epidemiology*, **22**, 273-8.
7. Y. Li, B.I. Graubard, and R. DiGaetano (2010), Weighting methods for population-based case-control study. *JRSS C*, **60** 165–185.
8. S. Goyal, Y.T. Kim, Y. Li and S.M. Iqbal (2010), Active and biomimetic nanofilters for selective protein separation. *Biomed. Microdevices*, **12**, 317-324.

9. N. Chatterjee and Y. Li (2010), Inference in semi-parametric regression models under partial questionnaire design and non-monotone missing data. *Journal of the American Statistical Association, Theory and Methods*, **105**, 787-797.
10. Y. Li, B.I. Graubard, and E.L. Korn (2010), Application of nonparametric quantile regression to body mass percentile curves from survey data. *Statistics in Medicine*, **29**, 558-572.
11. D. She, Y. Li, H. Zhang, B.I. Graubard, and Z. Li (2010), Trend test for genetic association populationbased case-control study with complex survey data. *Biostatistics*, **11**, 48-56.
12. P. Lahiri and Y. Li (2009), A new alternative to the standard  $F$  test in regression analysis for clustered data. *Statistical Planning and Inference*, **139**, 3430-41.
13. Y. Li and B.I. Graubard (2009), Testing Hardy-Weinberg Equilibrium and Homogeneity of Hardy-Weinberg Disequilibrium using Complex Survey Data, *Biometrics*, **65**, 1096-104.
14. C.L. Yu, Y. Li, D.M. Freedman, M.S. Linet, R.K. Kwok, B.H. Alexander, B.K. Armstrong, and T.R. Fears (2009), Assessment of lifetime cumulative sun exposure using a self-administered questionnaire: reliability of two approaches, *Cancer Epidemiology, Biomarkers & Prevention*, **18**, 464-71.
15. V.M. Chia, Y. Li, S.M. Quraishi, B.I. Graubard, J.D. Figueroa, J.P. Weber, S.J. Chanock, M.V. Rubertone, R.L. Erickson, K.A. McGlynn (2009). Effect modification of endocrine disruptors and testicular germ cell tumor risk by hormone-metabolizing genes. *International Journal of Andrology*, **33**, 588-96.
16. L.A. Anderson, C. Lauria, N. Romano, E.E. Brown, D. Whitby, B.I. Graubard, Y. Li, A. Messina, L. Gaffa, F. Vitale, J.J. Goedert (2009), Risk factors for classical Kaposi Sarcoma in a population-based case-control study in Sicily, *Cancer Epidemiology, Biomarkers & Prevention*, **17**, 3435-43.
17. V.M. Chia, Y. Li, L.R. Goldin, B.I. Graubard, M.H. Greene, L. Korde, M.V. Rubertone, R.L. Erickson, K.A. McGlynn (2009), Risk of cancer in first- and second-degree relatives of testicular germ cell tumor cases and controls, *International Journal of Cancer*, **124**, 952-7.
18. Y. Li (2008), Generalized regression estimators of a finite population total using the Box-Cox technique, *Survey Methodology*, **34**, 79-89.
19. L.E. Kelemen, S.S. Wang, U. Lim, W. Cozen, M. Schenk, P. Hartge, Y. Li, N. Rothman, S. Davis, S.J. Chanock, M.H. Ward, J.R. Cerhan (2008), Vegetables and antioxidant-related nutrients, genetic susceptibility and non-Hodgkin lymphoma risk, *Cancer Causes and Control*, **19**, 491-503.
20. L.A. Anderson, Y. Li, B.I. Graubard, D. Whitby, G. Mbisa, S. Tan, J.J. Goedert, E.A. Engels (2008), Human herpesvirus 8 infection among children and adolescents in the United States, *Pediatric Infectious Diseases Journal*, **27**, 661-664.
21. Y. Li and P. Lahiri (2007), Robust model-based predictor of the finite population totals, *Journal of the American Statistical Association, Theory and Methods*, **102**, 664-73.
22. M.P. Purdue, P. Hartge, S. Davis, J.R. Cerhan, J.S. Colt, W. Cozen, R.K. Severson, Y. Li, S.J. Chanock, N. Rothman, S.S. Wang (2007), Sun exposure, vitamin D receptor gene polymorphisms and risk of non-Hodgkin lymphoma, *Cancer Causes and Control*, **18**, 989-99.

### **Submitted**

23. D.Y. Lin and Y. Li. Haplotype-Based Statistical Inference for Population-Based Case-Control Studies with Complex Sample Designs.

24. H.A. Katki, Y. Li, and P.E. Castle. Estimating the agreement and diagnostic accuracy of two diagnostic tests when one test is conducted on only a subsample of specimens.
25. S.J. Nyante, B.I. Graubard, Y. Li, G.M. McQuillan, E.A. Platz, S. Rohrmann, G. Bradwin, D.A. McGlynn. Trends in sex hormone concentrations in U.S. males: 1988-1991 to 1999-2004.
26. Y. Li and B.I. Graubard. Profile semi-parametric maximum likelihood estimation of gene-environment interaction using population-based case-control study with probability sampling.
27. D. She, H. Zhang, Y. Li, B.I. Graubard, and Z. Li. Family Based Association Study with Complex Survey Data.

#### **HONORS AND AWARDS:**

- 2009 Travel Award to Eastern North American Region Workshop for Junior Investigators
- 2007 Division of Cancer Epidemiology and Genetics (DCEG) Fellows Award for Research Excellence
- 2006 One of the Six Best Submitted Papers for European Association of Methodology Award
- 2006 Washington Statistical Society Outstanding Graduate Student Award
- 2006 Travel Award to the Ninth Meeting of New Researchers in Statistics and Probability
- 2006 Winner of 2006 Joint Statistical Meetings (JSM) Student Paper Competition
- 2005 Travel Award to JSM
- 2004 Outstanding Work Performance Award from National Center for Health Statistics (NCHS)
- 2003 Outstanding Work Performance Award from NCHS

#### **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:**

- American Statistical Association
- Eastern North American Region/International Biometric Society
- International Chinese Statistical Association

#### **COURSES TAUGHT:**

- *Statistical Inference (graduate)*, University of Texas at Arlington, **Instructor**. Class size – about 10 students. Responsibilities: lectures, office hours, 4 exams per semester.
- *Statistical Methods for Clinical Studies (graduate)*, University of Texas at Arlington, **Instructor**. Class size – 6 students. Responsibilities: lectures, office hours, 1 exam per semester.
- *Sample Surveys (graduate)*, University of Texas at Arlington, **Instructor**. Class size – about 10 students. Responsibilities: lectures, office hours, 3 exams per semester.
- *Sampling Theory (graduate)*, University of Maryland at College Park, **Teaching assistant**. Class size – about 15 students. Responsibilities: recitations, office hours, composing and grading quizzes, home works and exams.
- *Mathematical Statistics I (undergraduate and graduate)*, University of Texas at Arlington, **Instructor**. Class size – about 15 students. Responsibilities: lectures, office hours, 3 exams per semester.
- *Mathematical Statistics II (graduate)*, University of Texas at Arlington, **Instructor**. Class size – 6 students. Responsibilities: lectures, office hours, 3 exams per semester.
- *Statistical Theory for Engineering Research (graduate)*, University of Texas at Arlington, **Instructor**. Class size – about 15 students. Responsibilities: lectures, office hours, 3 exams per semester.
- *Statistical Methods (undergraduate)*, University of Texas at Arlington, **Instructor**. Class size – about 40 students. Responsibilities: lectures, office hours, 4 exams per semester.

- *Calculus I (undergraduate)*, University of Nebraska at Lincoln, **Teaching assistant**. Class size – about 35 students. Responsibilities: recitations, office hours, composing and grading quizzes, home works and exams.

## **SELECTED LIST OF PRESENTATIONS**

- Abstract and Invited Talk: Semi-parametric Pseudo-Maximum-Likelihood Estimation Exploiting Gene-Environment Independence for Population-Based Case-Control Studies with Complex Sampling, 07/2011, *IMS-China International Conference on Statistics and Probability*, XiAn, China.
- Abstract and Invited Talk: Semi-parametric Pseudo-Maximum-Likelihood Estimation Exploiting Gene-Environment Independence for Population-Based Case-Control Studies with Complex Sampling, 06/2011, *International Chinese Statistical Association 2011 Applied Statistics Symposium*, New York.
- Abstract and Invited Talk: Pseudo-Semiparametric Inference of Gene-Environment Interactions for Population-Based Case-Control Studies with Complex Sampling, 08/2010, *Joint Statistical Meeting*, Vancouver, British Columbia, Canada.
- Abstract and Invited Talk: Weighting Methods for Population-Based Case-Control Study with Complex Sampling, 08/2009, *Joint Statistical Meeting*, Washington D.C.
- Abstract and Contributed Talk: Application of nonparametric percentile regression of body mass index percentile curves from survey data, 03/2009, *Conference by Eastern North American Region/International Biometric Society*, San Antonio, TX.
- Abstract and Invited Talk: Testing Hardy-Weinberg Equilibrium (HWE) and Homogeneity of Hardy-Weinberg Disequilibrium (HHWD) Using Complex Survey Data, 08/2008, *JSM*, Denver, Colorado.
- Abstract and Contributed Talk: Application of nonparametric percentile regression of body mass index percentile curves from survey data, 06/2008, *WNAR/IMS meeting*, Davis, CA.

## **CURRENT PH.D STUDENTS**

- Daoying Lin, Ph.D. candidate, expected in 2013  
Dissertation Title: “Statistical Methods for Population-Based Case-Control Studies with Complex Sampling”
- William Kenney, Ph.D. candidate, expected in 2015  
Dissertation Title: “Statistical Methods for National Genetic Household Surveys”

## **SUPERVISED MASTER STUDENTS**

- Fred Tsai, MS, 2011 Department of Mathematics, University of Texas at Arlington, Texas.  
Thesis Title: “Comparisons among HWE tests for National Genetic Household Surveys”

## **DISSERTATION/THESIS COMMITTEE MEMBERSHIP**

- Thomas Seaquist, Ph.D. committee (chair Andrzej Korzeniowski in Mathematics)
- Katsuhiko Iwao, Ph.D. committee member (chair Shan Sun-Mitchell in Mathematics)
- Darin Brezeale, Master committee (chair Ren-Cang Li in Mathematics)
- Ashwin K. Satyal, Master committee (chair Chien-Pai Han in Mathematics)
- Prince Albert Nfodzo, Ph.D. committee (chair Hyeok Choi in Civil Engineering)
- Juan Levesque, Ph.D. committee (chair James Grover in Biology)

## **PROFESSIONAL SERVICE**

- Member of the *Graduate Affair Committee*  
Department of Mathematics, University of Texas at Arlington, Fall 2010, Fall 2011-present
- Prelim-B (Statistics) exam coordinator/grader

Department of Mathematics, University of Texas at Arlington, 2010-present

- Prelim-A (Linear Algebra) grader
- Department of Mathematics, University of Texas at Arlington, Summer 2010
- Chair of the American Statistical Association (ASA) Contributed Session on *Epidemiology designs based on complex survey data*, Joint Statistical Meeting 2010
- Review Editor of the journal of [Frontiers in Genetics Architecture](#)
- Representation of the ASA Survey Research Methods Section on 2012 ENAR program committee
- Nominee of the Biometrics Section Representative to ASA Council of Sections Representative 2013-15
- Journal Reviewer for: *The Journal of American Statistical Association*, *Human Heredity*, *American Journal of Epidemiology*, *Statistics in Medicine*, *Biometrics*, *Economics and Human Biology*, *International journal of data mining and bioinformatics*, *Statistics in Medicine*, *Pakistan Journal of Statistics and Operation research*, *BMC Genetics*, *Statistical Applications in Genetics and Molecular Biology*

#### **ADDITIONAL INFORMATION**

- Programming experience in C/C++, Matlab, R, HTML, Fortran, Visual Basic
- Mathematical/Statistical Packages: R/Splus, SAS, WinBUGS, STATA, GAUSS, Mathematica
- US Permanent Resident