

CURRICULUM VITAE: YAN LI

Notarization. I have read the following and certify that this *curriculum vitae* is a current and accurate statement of my professional record. Signature Yan Li Date 10/28/2016

**1. PERSONAL INFORMATION**

(a) UID, LAST NAME, FIRST NAME, CONTACT INFORMATION

UID: yli6; Last Name: Li; First Name: Yan

Contact Information:

1218 LeFrak Hall

University of Maryland

College Park, MD 20742-4015

Email: [yli6@umd.edu](mailto:yli6@umd.edu)

Phone number: 301-314-6570

(b) CURRENT ACADEMIC APPOINTMENT

Yan Li, Ph.D.,

Associate Professor (since 08/2012 with tenure effective since 08/2013)

Joint Program in Survey Methodology

College of Behavioral and Social Sciences

University of Maryland at College Park, MD 20742

(c) OTHER ACADEMIC APPOINTMENTS WHILE AT UMD

- Member, Population Science Program within the University of Maryland Marlene and Stewart Greenebaum Cancer Center Program in Oncology
- Adjunct Professor, Survey Methodology Program, Institute for Social Research, University of Michigan, Ann Arbor, MI
- Consultant, Biostatistics Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH

(d) EDUCATIONAL BACKGROUND

Dec. 2006-Jul. 2009

**PostDoc**, Biostatistics Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute

Field of Study: Survey Statistics and Biostatistics

Mentor: Dr. Barry Graubard

Jan. 2003-Dec. 2006

**Ph.D.**, University of Maryland at 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 at 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 (Academician of the Chinese Academy of Sciences)

Sep. 1993-Jul. 1997

**B.S.**, Beijing Institute of Technology, China

Major: Computer Science

(e) EMPLOYMENT BACKGROUND

Associate Professor, Joint Program in Survey Methodology, University of Maryland at College Park College Park, MD, 08/2012 – Present

Assistant Professor (Tenure-Track), Department of Mathematics, University of Texas at Arlington Arlington, TX, 09/2009 – 08/2012  
(also as a visiting researcher from 09/2008-08/2009)

Adjunct Faculty, Department of Clinical Science, University of Texas Southwestern Medical Center Dallas, TX, 09/2010 – 01/2013

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

Research and Teaching Assistant, Joint Program in Survey Methodology, University of Maryland at College Park College Park, MD, 01/2003 – 07/2003

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

Research and Teaching Assistant, Department of Mathematics and Statistics, University of Nebraska at Lincoln Lincoln, NE, 08/2001-08/2002

**2. RESEARCH, SCHOLARLY AND CREATIVE ACTIVITIES**

(a) ARTICLES IN PEER REVIEWED JOURNALS

**Summary:** 41 journal papers

Methodological Paper during 2013 – Present (\*paper with students)

- 1) L.X. Wang\*, B.I. Graubard, Y. Li (2016), A Composite Likelihood Approach in Testing for Hardy Weinberg Equilibrium using Family-Based Genetic Survey Data. *Statistics in Medicine*. DOI: 10.1002/sim.7044.
- 2) D.Y. Lin\*, L.X. Wang\*, Y. Li (2016), Haplotype-based statistical inference for population-based case-control and cross-sectional studies with complex sample designs. *Journal of Survey Statistics and Methodology*, DOI: 10.1093/jssam/smv040.
- 3) Y. Li, O. Panagiotou, A. Black, D. Liao, S. Wacholder (2015), Multivariate piecewise exponential survival modeling. *Biometrics*, DOI: 10.1111/biom.12435.
- 4) Y. Li, M. Safaeian, Robbins H, B.I. Graubard (2015), Logistic Analysis of Epidemiologic and Survey Studies with Augmentation Sampling Involving Re-stratification and Population Expansion. *Biostatistics*, **16**,169-78.
- 5) Y. Li, B.I. Graubard, P. Huang\*, and J.L. Gastwirth (2015), Extension of the Peter-Belson method to estimate health disparities among multiple groups using logistic regression with survey data. *Statistics in Medicine*, **34**, 595-612.
- 6) D. She, H. Zhang, Y. Li, B. I. Graubard, and Z. Li (2014), Family Based Association Study with Complex Survey Data, *Statistics and Its Interface*, **7**, 167-76.

- 7) Y. Li (2013), Testing Hardy-Weinberg equilibrium using family data from national household genetic surveys. *BMC Genetics*, **14**, 14.

Collaborative Paper during 2013 - Present

- 8) F.M. Perna, K. Coa, R.P. Troiano, G.H. Lawman, C.Y. Wang, Y. Li, R.P. Moser, J.T. Ciccolo, B.A. Comstock, W.J. Kraemer (2016), U.S. Population Muscular Grip-Strength Estimates from the National Health and Nutrition Examination Survey (NHANES) 2011-2012. *Journal of Strength and Conditioning Research*, **30**, 867-74.
- 9) L. Ke, R.S. Mason, E. Mpofu, M. Dibley, Y. Li, et al. (2015), Vitamin D and parathyroid hormone status in a representative population living in Macau, China. *J Steroid Biochem Mol Biol.*, **148**, 261-268. PubMed PMID: 25636721.
- 10) M.S. Shiels, H.A. Katki, N.D. Freedman, M. Purdue, N. Wentzensen, B. Trabert, C.M. Kitahara, M. Furr, Y. Li, T.J. Kemp, J.J. Goedert, C.M. Chang, E. Engels, N.E. Caporaso, L.A. Pinto, A. Hildesheim, A. Chaturvedi (2014), Cigarette Smoking and Variations in Systemic Immune and Inflammation Markers. *J. Natl. Cancer Inst.*, **106**, dju294.
- 11) A.W. Hsing, E. Yeboah, R. Biritwum, Y. Tettey, A.M. De Marzo, A. Adjei, G.J. Netto, K. Yu, Y. Li, A.P. Chokkalingam, L.W. Chu, D. Chia, A. Partin, I.M. Tompson, S.M. Quraishi, S. Niwa, R. Tarone, R.N. Hoover (2014), High prevalence of screen-detected prostate cancer in West Africans: implications for racial disparity of prostate cancer. *Journal of Urology*, **192**, 730-35.
- 12) K. A. Lang Kuhs, C. Porras, J. Schiller, A. C. Rodriguez, M. Schiffman, P. Gonzalez, S. Wacholder, A. Ghosh, Y. Li, D. Lowy, et al. (2014), Differing human papillomavirus serological and DNA criteria may affect vaccine efficacy estimates. *American Journal of Epidemiology*, **180**, 599-607.
- 13) H. Robbins, Y. Li, C. Porras, A. Ghosh, A.C. Rodriguez, M. Schiffman, S. Wacholder, et al. (2014), Glutathione S-transferase L1 multiplex serology as a measure of cumulative infection with human papillomavirus. *BMC Infectious Diseases*, **14**, 120.
- 14) L. Ke, J. Ho, E. Mpofu, M. Dibley, X. Feng, F. Van, S. Leong, W. Lau, P. Lueng, C. Kowk, Y. Li, R.S. Mason, K.E. Brock (2014), Modifiable risk factors including sunlight exposure and fish consumption are associated with risk of hypertension in a large representative population from Macau. *J. Steroid Biochem Mol. Biol.*, **144** Pt A: 152-5.
- 15) C. Schairer, Y. Li, P. Frawley, B.I. Graubard, R.D. Wellman, D.S.M. Buist, K. Kerlikowske, T.L. Onega, W.F. Anderson, and D.L. Miglioretti (2013), Risk factors for Inflammatory breast cancer and other Invasive breast cancers. *J. Natl. Cancer Inst.*, **105**, 1373-84.
- 16) Y. Pan, K. Caldwell, Y. Li, S. Caudill, M. Mortensen, A. Makhmudov, R. Jones (2013), Smoothed Urinary Iodine Percentiles for U.S. Population and Pregnant Women, National Health and Nutrition Examination Survey, 2001-2010. *European Thyroid Journal*, **2**, 127-34.

Methodological Paper during 2007-2012

- 17) Y. Li and B.I. Graubard (2012), Profile semi-parametric maximum likelihood estimation of gene-environment interaction using population-based case-control study with probability sampling. *Biostatistics*, **13**, 711-23.
- 18) Y. Li, M.H. Gail, D.L. Preston, B.I. Graubard, and J.H. Lubin (2012), Piecewise exponential survival times and analysis of case-cohort data. *Statistics in Medicine*, **31**, 1361-8.

- 19) H.A. Katki, Y. Li, and P.E. Castle (2012), Estimating the agreement and diagnostic accuracy of two diagnostic tests when one test is conducted on only a subsample of specimens. *Statistics in Medicine*, **31**, 436-48.
- 20) C.P. Han and Y. Li (2011), Regression analysis with block missing values and variables selection. *Pakistan Journal of Statistics and Operation Research*, **7**, 2.
- 21) Y. Li, Z. 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.
- 22) Y. Li, B.I. Graubard, and R. DiGaetano (2010), Weighting methods for population-based case-control study. *Journal of Royal Statistical Society C*, **60**, 165–185.
- 23) 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.
- 24) 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.
- 25) D. She, Y. Li, H. Zhang, B.I. Graubard, and Z. Li (2010), Trend test for genetic association population-based case-control study with complex survey data. *Biostatistics*, **11**, 48-56.
- 26) 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.
- 27) 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.
- 28) Y. Li (2008), Generalized regression estimators of a finite population total using the Box-Cox technique. *Survey Methodology*, **34**, 79-89.
- 29) 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.

Collaborative Paper during 2007-2012

- 30) S.J. Nyante, B.I. Graubard, Y. Li, G.M. McQuillan, E.A. Platz, S. Rohrmann, G. Bradwin, D.A. McGlynn (2012), Trends in sex hormone concentrations in U.S. males: 1988-1991 to 1999-2004. *International Journal of Anthology*, **35**, 456-66.
- 31) 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, Robert N. Hoover, A.W. Hsing (2012), Prevalence of benign prostatic hyperplasia and lower urinary tract symptoms in West Africans. *Prostate Cancer and Prostatic Diseases*, **15**, 170-6.
- 32) 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. (lightly reviewed)
- 33) 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.
- 34) S. Goyal, Y.T. Kim, Y. Li and S.M. Iqbal (2010), Active and biomimetic nanofilters for selective protein separation. *Biomed. Micordevices*, **12**, 317-324.

- 35) 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.
- 36) 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.
- 37) 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.
- 38) 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.
- 39) 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.
- 40) 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.
- 41) 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.

(b) BOOK REVIEW

- 1) Y. Li (2014), "When to Use What Research Design," *American Statistician*.

(c) PROCEEDINGS PAPERS AND TECHNICAL REPORTS

- 1) Y. Li and P.D. Williams (2005), "A new multiple-bootstrap-datasets presentation method for confidentiality protection," *Proceeding of Survey Research Methods Section, American Statistical Association*, pp. 1306-33.
- 2) Y. Li, C. Lynch, and I. Shimizu (2004), "Estimation of imputed variance for National Ambulatory Medical Care Survey," *Proceedings of Survey Research Methods Section, American Statistical Association*, pp. 3883-88.
- 3) Y. Li (2002), "Estimation of crop yield for small areas – an application of EBLUP method," Tech. Report, University of Nebraska-Lincoln.
- 4) Y. Li, H.-W. Deng and R.R. Recker (2001) "LOD score exclusion analyses for candidate QTLs using random population samples," *Proceedings of the 32<sup>nd</sup> Annual Midwest Student Biomedical Research Forum*, Page: P-19.
- 5) Y. Li and H.W. Deng (2001), "Population Admixture May Mask, Change or Reverse Genetic Effects of Genes Underlying Complex Traits," *Second Annual Meeting of the Great Plain States Society for Molecular Biology and Genetics*, Abstract 31.

(d) COFERENCES AND WORKSHOPS: TALKS, ABSTRACTS, AND OTHER CONTRIBUTIONS

Year 2013 – Present

- Abstract and Invited Talk: Using Threshold Regression to Analyze Survival Data from Complex Surveys: With Application to Mortality Linked NHANES III Phase II Genetic Data, 12/2016, *The 10th ICSA International Conference*, Shanghai, China.
- Abstract and Speed Poster: Extension of the Peters-Belson method to estimate health disparities among multiple groups using logistic regression with survey data, 08/2016, *Joint Statistical Meeting*, Chicago, IL.
- Abstract and Contributed Talk: Variable selections for the nested error regression models with applications in small area estimation, 08/2016, *SAE Conference*, Maastricht, Netherlands.
- Abstract and Invited Talk: Genetic analyses using family-based survey data, 07/2016, *Academy of Mathematics and Systems Science, Beijing Academy of Sciences*, Beijing, China.
- Abstract and Invited Talk: Extension of the Peters-Belson method to estimate health disparities among multiple groups using logistic regression with survey data, 07/2016, *the Forth International Symposium on Biostatistics*, Shanghai, China.
- Abstract and Topic Contributed Talk: Genetic analyses using family-based survey data, 06/2016, *the 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting*, Hong Kong, China.
- Invited Talk: Extension of the Peter-Belson method to estimate health disparities among multiple groups using logistic regression with survey data, 03/2016, *ENAR*, Austin, TX.
- Abstract and Invited Talk: Genetic data analysis using family-based complex survey data, *the 4th Baltic-Nordic Conference on Survey Statistics*, 08/2015, Helsinki, Finland.
- Abstract and Topic Contributed Talk: A composite likelihood approach in testing for Hardy Weinberg equilibrium using family-based genetic survey data, 08/2015, *Joint Statistical Meeting*, Seattle, WA.
- Abstract and Invited Talk: Haplotype-based statistical inference for population-based case-control and cross-sectional studies with complex sampling, 12/2014, *International Conference by the Institute of Applied Statistics*, Colombo, Sri Lanka.
- Abstract and Invited Talk: Haplotype-based statistical inference for population-based case-control and cross-sectional studies with complex sampling, 05/2014, *Conference on Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data*, College Park, MD.
- Abstract and Invited Talk: Application of nonparametric percentile regression of body mass index percentile curves from survey data, 08/2013, *The 59<sup>th</sup> World Statistics Congress*, Hong Kong, China.
- Topic Contributed Talk: Testing Hardy-Weinberg equilibrium for national genetic household surveys, 03/2013, *ENAR*, Orlando, FL.
- Invited Talk: Testing Hardy-Weinberg equilibrium for national genetic household surveys, 02/2013, *Washington Statistical Society*, Washington DC.

Year 2012 and Before

- Abstract and Topic Contributed Talk: Testing Hardy-Weinberg equilibrium for national genetic household surveys, 08/2012, *Joint Statistical Meeting*, San Diego, CA.
- Invited Talk: Weighting methods and pseudo-semiparametric inference for population-based case-control studies with complex sampling, 02/2012, *Joint Program in Survey Methodology*, University of Maryland at College Park, MD.
- Invited Talk: Weighting methods and pseudo-semiparametric inference for population-based case-control studies with complex sampling, 02/2012, *Biostatistics Division at School of Public Health*, University of Minnesota, Minneapolis, MN.
- Invited Talk: Weighting methods and pseudo-semiparametric inference for population-based case-control studies with complex sampling, 02/2012, *Department of Statistics*, George Washington University, Washington DC.
- Invited Talk: Weighting methods and pseudo-semiparametric inference for population-based case-control studies with complex sampling, 02/2012, *Department of Mathematical Sciences*, University of Texas at Dallas, Dallas, TX.
- Invited Talk: Weighting methods and pseudo-semiparametric inference for population-based case-control studies with complex sampling, 02/2012, *The Biostatistics & Bioinformatics Branch, Division of Epidemiology, Statistics, and Prevention Research of the Eunice Kennedy Shriver, National Institute of Child Health and Human Development*, NIH, Rockville, MD.
- Invited Talk: Weighting methods for population-based case-control studies with complex sampling, 02/2012, *University of Texas Chapter, Mathematical Association of America*, Arlington, TX.
- Invited Talk: Weighting methods and pseudo-semiparametric inference for population-based case-control studies with complex sampling, 03/2012, *Department of Biostatistics and Computational Biology, Susan Smith Center for Women's Cancers, Dana-Farber Cancer Institute, Harvard Medical School*, Boston, MA.
- 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.
- Invited Talk: Semi-parametric pseudo-maximum-likelihood estimation exploiting gene-environment independence for population-based case-control studies with complex sampling, 10/2010, *Department of Biology*, University of Texas at Arlington, Arlington, TX.
- Abstract and Invited Talk: Semi-parametric pseudo-maximum-likelihood estimation exploiting gene-environment independence 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 studies 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, *Joint Statistical Meeting*, Denver, Colorado.
- Abstract and Contributed Talk: Application of nonparametric percentile regression of body mass index percentile curves from survey data, 06/2008, *Western North American Region/Institute Mathematical Statistical meeting*, Davis, CA.
- Invited Talk: Application of nonparametric percentile regression of body mass index percentile curves from survey data, 02/2008, *University of Texas Southwestern Medical Center*, Dallas, TX.
- Invited Talk: Testing Hardy-Weinberg Equilibrium (HWE) and Homogeneity of Hardy-Weinberg Disequilibrium (HHWD) Using Complex Survey Data, 02/2008, *University of Texas*, Arlington, TX.
- Abstract and Invited Talk: Robust model-based and model-assisted predictors of the finite population total, 08/2006, *Joint Statistical Meeting*, Seattle, WA.
- Abstract and Contributed Talk: A new multiple-bootstrap-datasets presentation method for confidentiality protection, 08/2005, *Joint Statistical Meeting*, Minneapolis, MN.
- Invited Talk: A new multiple-bootstrap-datasets presentation method for confidentiality protection, 07/2005, *National Center for Health Statistics*, Hyattsville, MD.
- Abstract and Contributed Talk: Estimation of imputed variance for National Ambulatory Medical Care Survey, 08/2004, *Joint Statistical Meeting*, Toronto, Canada.
- Invited Talk: Estimation of imputed variance for National Ambulatory Medical Care Survey, 07/2004, *National Center for Health Statistics*, Hyattsville, MD.

(e) SPONSORED RESEARCH

- Summary:** 1. Total: \$3.65M as a PI or Co-PI; my total share: \$530K  
 2. Sole PI of three NIH R03 or equivalent grants, Co-PI of one NIH R01, and Co-PI of one DARPA.

Year 2013 – Present

PI (with Co-PI Partha Lahiri in JPSM) "Conference on 'Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data'," National Science Foundation	\$10,000	04/2014 – 05/2015
Sole PI, "Semiparametric Inference for Case-Control Studies with Complex Sampling," NIH- R03 CA1710649, National Institute of Health	\$140,325	09/2013 – 08/2016
Sole PI, "Genetic Association Studies in National Household Surveys," Research Fellowship–ASA/NCHS	\$133,741	01/2014 – 10/2014



PI (with Co-I Mei-Ling Lee in Department of Epidemiology and Biostatistics), \$ 20,000 "Incorporating Threshold Regression in Survey Methodology," SEED-University of Maryland at College Park	08/2013 – 08/2014
<u>Year 2012 and Before</u>	
Sole PI, "SNP-based pseudo-semiparametric inference for the case-control studies," NIH-U01 CA159424, National Institute of Health	09/2011 – 08/2014
Co-PI (with PI Romero in Bioengineering at the University of Texas at Arlington), \$2,195,054 (My Share: \$60,261) "Cellular and molecular contributions to signal instability in peripheral regenerative neurointerfaces," DARPA-BAA-10-32, Department of Energy, Defense Advanced Research Projects Agency	11/2010 – 10/2013
Co-PI (with PI Chen in Biostatistics at the University of Pennsylvania) ~\$1,000,000 (My Share: \$35,091) "Statistical Methods in Genetic Epidemiology Research," NIH-5R01ES016626, National Institute of Health	04/2010 – 03/2012
Sole PI "Statistical Analyses of Gene-Environment Interactions," Research Enhancement Program, The University of Texas at Arlington	05/2009 – 08/2010

DEVELOPED SOFTWARE Please see software section on  
<http://www.jointprogram.umd.edu/jpsm/?people/faculty/yli.htm>

### 3. TEACHING, MENTORING, AND ADVISING

#### (a) COURSES TAUGHT IN THE LAST FIVE YEARS

**Summary:** as an instructor, have taught six different courses at the University of Maryland at College Park, and seven at the University of Texas at Arlington.

#### Year 2013 – Present

- *Federal Statistical System (undergraduate and graduate)*, University of Maryland at College Park, **Instructor**. Class size – 15 students. Responsibilities: weekly HW and 1 essays.
- *Topics in Survey Methodology (graduate)*, University of Maryland at College Park, **Instructor**. Class size – 8 students. Responsibilities: lectures, office hours, weekly HW, 2 essays and 1 oral presentation.
- *Statistical Methods in Public Health (graduate)*, University of Maryland at College Park, **Instructor** (co-instructor Dr. Barry Graubard). Class size – 5 students. Responsibilities: lectures, office hours, biweekly HW.
- *Analysis of Complex Sample Data (graduate)*, University of Maryland at College Park, **Instructor**. Class size – 17 students. Responsibilities: lectures, office hours, weekly HW, 1 midterm, 1 final.
- *Inference for Complex Surveys (graduate)*, University of Maryland at College Park, **Instructor**. Class size – 8 students. Responsibilities: lectures, office hours, weekly HW, 2 exams per semester.
- *Random/Nonrandom Experimental Design (graduate)*, University of Maryland at College Park, **Instructor**. Class size – 15 students. Responsibilities: lectures, office hours, 2 exams per semester.

Year 2012 and Before

- *Applied Sampling (graduate)*, University of Maryland at College Park, **Instructor** (co-instructor Prof. Jim Lepkowski). Class size – 42 students. Responsibilities: lectures, office hours, 2 exams per semester.
- *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 – 5 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 (graduate)*, University of Texas at Arlington, **Instructor**. Class size – 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 Research (graduate)*, University of Texas at Arlington, **Instructor**. Class size – 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, homework and exams.

(b) ADVISING: RESEARCH DIRECTION

Current Doctoral Student:

- Lingxiao Wang, Ph.D. student, Joint Program in Survey Methodology, University of Maryland at College Park, Maryland

Supervised Doctoral Student during 2013 – Present

- Zhenyi Xue, graduated in Winter, 2015, Applied Mathematics & Statistics, and Scientific Computation, University of Maryland at College Park, Maryland (co-supervised with Prof. Partha Lahiri)  
Dissertation Title: “Bayesian Methods to Estimation Inbreeding Coefficient for Single Nucleotide Polymorphism Collected from Complex Surveys”
- Daoying Lin, Ph.D., graduated in Summer, 2013, Department of Mathematics, University of Texas at Arlington, Texas  
Dissertation Title: “Statistical Methods for Population-Based Case-Control Studies with Complex Sampling”

Supervised Master’s Students during 2013 – 2015

- Lingxiao Wang, MS, 2015 Joint Program in Survey Methodology, University of Maryland at College Park, Maryland

Research topic: A Composite Likelihood Approach in Testing for Hardy Weinberg Equilibrium using Family-Based Genetic Survey Data

- Pengyu Huang, MS, 2014 Joint Program in Survey Methodology, University of Maryland at College Park, Maryland  
Research topic: Extension of the Peter-Belson method to estimate health disparities among multiple groups using logistic regression with survey data

#### Supervised Master's Students during Year 2012 and Before

- Fred Tsai, MS, 2011 Department of Mathematics, University of Texas at Arlington, Texas.  
Thesis Title: "Comparisons among Hardy-Weinberg Equilibrium Tests for National Genetic Household Surveys"
- Daoying Lin, MS, 2012, Department of Mathematics, University of Texas at Arlington, Texas  
Thesis Title: "Haplotype-Based Statistical Inference for Population-Based Case-Control Studies with Complex Sample Designs"
- William Kenney, MS, 2012, Department of Mathematics, University of Texas at Arlington, Texas  
Thesis Title: "Genetic Association Test for National Household Surveys that Collect Family-Based Genetic Data"

#### Current Dissertation/Comprehensive Exam Committee Membership

- Afnan Al-Ibrahim, Dissertation Committee (Chair Robert Jackson in Department of Nutrition and Food Science, UMD)
- Xia Li, Dissertation committee (Chair Eric Slud in Mathematics, UMD)
- Benjamin Reist, Dissertation committee (Chair Richard Valliant in JPSM, UMD)
- Alena Maze, Dissertation committee (Chair Richard Valliant in JPSM, UMD)
- Sepideh Mosaferi, Comprehensive exam committee (Chair, JPSM, UMD)
- Stephanie Coffey, Comprehensive exam committee (Member, JPSM, UMD)
- Josh Langeland, Comprehensive exam committee (Member, JPSM, UMD)

#### Past Dissertation/Thesis/Comprehensive Exam Committee Membership

- Sarah Vetting, Comprehensive exam committee (Chair, JPSM, UMD)
- Thomas Seaquist, Dissertation committee (chair Andrzej Korzeniowski in Mathematics, UTA)
- Katsuhiko Iwao, Dissertation committee member (chair Shan Sun-Mitchell in Mathematics, UTA)
- Prince Albert Nfodzo, Dissertation committee (chair Hyeok Choi in Civil Engineering, UTA)
- Juan Levesque, Dissertation committee (chair James Grover in Biology, UTA)
- Darin Brezeale, Thesis committee (chair Ren-Cang Li in Mathematics, UTA)
- Ashwin K. Satyal, Thesis committee (chair Chien-Pai Han in Mathematics, UTA)
- Haowen Tang, Thesis committee (chair Chien-Pai Han in Mathematics, UTA)

## 4. SERVICE

### Year 2013 – Present

#### (a) EDITORSHIP, EDITORIAL BOARDS AND REVIEWING ACTIVITIES FOR JOURNALS

- i. Associate-Editor, *Sankhya B*
- ii. Journal Reviewer for:  
*Medicine, Journal of American Statistical Association, Biometrics, Annals of Statistics, Statistics in Medicine, Journal of Official Statistics, Human Heredity, American Journal of Epidemiology, Economics and Human Biology, International Journal of Data Mining and Bioinformatics, Briefings in Bioinformatics, Pakistan Journal of Statistics and Operation Research, BioMed Central Genetics, Statistical Applications in Genetics and Molecular Biology, Frontiers in Genetic Architecture, Statistical Methods in Medical Research, Medicine.*

(b) PROFESSIONAL SERVICE

- i. OFFICES AND COMMITTEE MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS
  - Member, Design and Analysis Committee for the National Assessment of Educational Progress, Educational Testing Service and the National Center for Education Statistics, 2016-present
  - Member, AAPOR/ASA Data Falsification Task Force, 2016-present
  - Program Chair, Survey Research and Methodology Section, American Statistical Association, 2016
  - Program Chair Elect, Survey Research and Methodology Section, American Statistical Association, 2015
  - Member, Statistical Partnerships Among Academe, Industry, and Government Committee, American Statistical Association, 2014-2016
  - Member, Scientific Program Committee and Local Organization Committee, Conference on Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data, 2013-2014
  - Chair, Student/Young Investigator Travel Award and Paper Selection Committee, Conference on Frontiers of hierarchical Modeling in Observational Studies, Complex Surveys and Big Data, 2014.
- ii. OTHER NON-UNIVERSITY COMMITTEES, COMMISSIONS, PANELS, ETC.
  - Judge, Poster Award Selection Committee, Survey Research Method Section, American Statistical Association, 2016
  - Organizer, Topic-contributed session organizer on *Calibration and Semiparametric Techniques in Surveys and Biostatistics*, Joint Statistical Meeting, 2015
  - Invited/plenary session chair, Conference on Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data, 2014
  - Nominee, Biometrics Section Representative to ASA Council of Sections Representative 2013-15
  - Chair, Invited session on *Complex Survey Methodology and Application*, ENAR 2013
- iii. OTHER UNPAID SERVICES TO LOCAL, STATE AND FEDERAL AGENCIES
  - Special Volunteer, DHANES, National Center for Health Statistics, Center for Disease Control, 10/2014~06/2015

(c) CAMPUS SERVICE

- Senator  
*University Senate* 05/2014-04/2017
- Director of Graduate Studies  
*Joint Program in Survey Methodology, University of Maryland at College Park*, 09/2014-Present
- Organizer, *Research Seminar Series*  
*Joint Program in Survey Methodology, University of Maryland at College Park*, 09/2013-Present
- Member of *Graduate Admission Committee*  
*Joint Program in Survey Methodology, University of Maryland at College Park*, 01/2013-Present
- Member, Outstanding Graduate Advisor Award Committee  
*College of Behavior and Social Sciences*, 03/2015
- Department Representative, College Council  
*College of Behavior and Social Sciences*, 09/2013-12/2014
- Member, JPSM Postdoc Search Committee  
*Joint Program in Survey Methodology, University of Maryland at College Park*, 04/2014

Year 2012 and Before

OFFICES AND COMMITTEE MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

- Member, American Statistical Association (ASA), 2004-present
- Member, Eastern North American Region (ENAR) / International Biometric Society, 2009-present

OTHER NON-UNIVERSITY COMMITTEES, COMMISSIONS, PANELS, ETC.

- Chair, Contributed session on *Epidemiology Designs Based on Complex Survey Data*, Joint Statistical Meeting 2010

OTHER UNPAID SERVICES TO LOCAL, STATE AND FEDERAL AGENCIES

- Research Consultant, Biostatistics Branch, Division of Cancer and Epidemiology and Genetics, National Cancer Institute, NIH, 04/2011~present

CAMPUS SERVICE

- Member, Graduate Affairs Committee  
*Department of Mathematics, University of Texas at Arlington, 08/2010-12/2010 & 08/2011-08/2012*
- Leader, Preliminary-B Exam in Statistics  
*Department of Mathematics, University of Texas at Arlington, 08/2010-08/2012*
- Grader, Preliminary-A Exam for Linear Algebra  
*Department of Mathematics, University of Texas at Arlington, 08/2010*
- Facilitator, "Calculus Bowl 2011" competition among 28 Dallas/Fort Worth high schools  
*Department of Mathematics, University of Texas at Arlington, 2011*

**5. AWARDS AND HONORS**

- 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 Best Six 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 Meeting Student Paper Competition
- 2005 Travel Award to Joint Statistical Meeting
- 2004 Outstanding Work Performance Award from National Center for Health Statistics (NCHS)
- 2003 Outstanding Work Performance Award from NCHS