

## CURRICULUM VITAE

### **Qingxia (Cindy) Chen, Ph.D.**

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### **EDUCATION**

1999 BS in Statistics, University of Science and Technology of China, Hefei, Anhui, China

2001 MS in Statistics, University of Pittsburgh, Pittsburgh, PA.

2005 PhD in Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, NC  
Dissertation: Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problem

### **ACADEMIC APPOINTMENTS**

2005–2013 Assistant Professor, Department of Biostatistics, Vanderbilt University School of Medicine.

2012–2013 Assistant Professor, Department of Biomedical Informatics, Vanderbilt University School of Medicine.

2014–2016 Associate Professor, Department of Biostatistics, Vanderbilt University School of Medicine.

2014–2016 Associate Professor, Department of Biomedical Informatics, Vanderbilt University School of Medicine.

2016–Present Associate Professor, Department of Biostatistics, Vanderbilt University Medical Center, School of Medicine.

2016–Present Associate Professor, Department of Biomedical Informatics, Vanderbilt University Medical Center, School of Medicine.

### **AWARDS AND HONORS**

2015 James E. Grizzle Distinguished Alumna Award, University of North Carolina at Chapel Hill

|             |  |
|-------------|--|
| 2014        | Department Method Publication Award (2013)                                     |
| 2013        | SAMSI Travel Award   |
| 2007        | ENAR New Researcher Travel Grant   |
| 2007        | IMS New Researcher Travel Grant  |
| 2007        | SAMSI Travel Award   |
| 2005        | Student Travel Award, University of North Carolina at Chapel Hill              |
| 2004        | JSM-SBSS Student Travel Award  |
| 1995 - 1999 | Outstanding Student Scholarship, University of Science and Technology of China |

## EMPLOYMENT

|           |  |
|-----------|--|
| 2001      | Internship in Western Psychiatric Institute and Clinics, Pittsburgh                          |
| 2001-2005 | Research Assistant, Department of Biostatistics, University of North Carolina at Chapel Hill |
| 2000-2001 | Research Assistant, Department of Statistics, University of Pittsburgh                       |

## PROFESSIONAL ORGANIZATIONS

|              |   |
|--------------|---|
| 2002-Present | American Statistical Association              |
| 2003-Present | International Biometric Society               |
| 2003-Present | International Society for Bayesian Analysis   |
| 2009-Present | International Chinese Statistical Association |

## PROFESSIONAL ACTIVITIES

### Intramural

- Primary Doctoral Dissertation Advisor
  - 2012-2015 (MS), Austin Marcus Lanser.  
Dissertation title: Evaluation of methods for survival analysis under the constraint of few events per variable.
  - 2012-current, In progress, (Ph.D.), Schlueter, David.
- Mentees
  - Dana Blakemore, MS, Biostatistician II, Department of Biostatistics (2007-2009).
  - Angel An, MS, Biostatistician III, Department of Biostatistics (2007-2009).
  - Hui Nian, PhD, Biostatistician III, Department of Biostatistics (2010-Present).
  - Xue Han, MS, Biostatistician II, Department of Biostatistics (2011-Present).
  - Qi Liu, PhD student, Research Assistant, Department of Biostatistics (2011-2012).

- Academic Advisor
  - Nate Mercaldo, PhD student, Department of Biostatistics (2011-current).
  - Run Fan, MS student, Department of Biostatistics (2013-current).
- Committees
  - Graduate Admissions Committee, Department of Biostatistics (2010–2014, 2016)
  - Graduate Program Committee, Department of Biostatistics (2009–Present)
  - Faculty Search Committee, Department of Biostatistics (2005–Present)
  - Staff Promotion Committee (2013-present)
  - Department of Biostatistics Award Committee
- Research Supervision
  - Primary Advisor, Austin Marcus Lanser (MS student of Department of Biostatistics) (2013-2015).
  - Primary Advisor, David Schlueter (PhD student of Department of Biostatistics) (2015-present).
  - Committee Member, Jeffrey Thomas Leegon (MS student of Department of Biomedical Informatics) (2010-2011).
  - Committee Member, Naqi Ali Khan (PhD student of Department of Biomedical Informatics) (2011-2012).
  - Committee Member, Zhou Yan (MS student of Department of Biomedical Informatics) (2011-2013).
  - Committee Member, Yukun Chen (PhD student of Department of Biomedical Informatics) (2013-2015).
  - Committee Member, Joshua Carl Smith (PhD student of Department of Biomedical Informatics) (2012-present).
  - Committee Member, Dong Wang (PhD student of Department of Biomedical Informatics) (2012-present).
  - Committee Member, Yaa Kumah-Crystal (MS student of Department of Biomedical Informatics) (2013-present).
  - Committee Member, Mark Giganti (PhD student of Department of Biostatistics) (2015-present).
  - Committee Member, Svetlana Eden (PhD student of Department of Biostatistics) (2016-present).
  - Committee Member, Lucy McGowan D’Agostino (PhD student of Department of Biostatistics) (2016-present).

## Extramural

- Referees
 

Statistics in Medicine, Journal of the American Statistical Association, Bayesian Analysis, Lifetime Data Analysis, Journal of Statistical Planning and Inference, Biometrics, Journal of the American Medical Informatics Association, Journal of the Royal Statistical Society,

Series C, Clinical Trials, Health Services and Outcomes Research Methodology, Philosophical Transactions of the Royal Society A, Statistical Sinica, Canadian Journal of Statistics, Epidemiology, Biometrical Journal, Journal of Official Statistics, Mathematical Reviews, A Division of the American Mathematical Society, OMICS Publishing Group

- Conferences
  - Session Chair, Data Augmentation, EM, and Bayesian Methods with Missing Data, Joint Statistical Meeting, Minneapolis, Minnesota. (August, 2005)
  - Session Chair, Adaptive Designs for Clinical Trials, Eastern North American Region, Miami, Florida. (March, 2011)
  - Session Organizer and Chair, Semi-Competing Risks, Eastern North American Region, Baltimore, Maryland. (April, 2012)
  - Session Chair, Kaleidoscope IIa, useR!, Nashville, Tennessee. (June, 2012)
  - Session Chair, Causal inference, International Chinese Statistical Association, Boston, Massachusetts. (June, 2012)
  - Session Chair, The Latest Development of Adaptive Clinical Designs, International Chinese Statistical Association, Boston, Massachusetts. (June, 2012)
  - Session Chair, Novel Developments in the Construction and Evaluation of Risk Prediction Models, Eastern North American Region, Orlando, Florida. (March, 2013)
  - ENAR RAB Poster Award Competition Judge. (March, 2013)
  - Session Organizer and Chair, Recent Developments in Survival Analysis, Joint Applied Statistics Symposium of
  - International Chinese Statistical Association & Korean International Statistical Society, Portland, Oregon. (June, 2014)
  - Session Organizer, Emerging issues in clinical trials and high dimensional data, Eastern North American Region, Miami, Florida. (March 2015)
  - Session Organizer, Emerging Issues in Time-to-Event Data, International Chinese Statistical Association, Fort Collins, Colorado. (June 2015)
  - Session Organizer, Emerging issues in clinical trials with time-to-event data in the presence of competing risks, Eastern North American Region, Austin, Texas. (March 2016)
  - Session Organizer, A Recent Development on Competing and Semi-competing Risks, Data Science, Precision Medicine and Risk Analysis with Lifetime Data 2017 LIDA Conference, Storrs, Connecticut. (May 2017)
- Committees
  - International Chinese Statistical Association Program Committee for 2013-2015
  - International Chinese Statistical Association Representative to 2014 Joint Statistical Meeting Program Committee
- Editorial
  - Editorial Board, ISRN Epidemiology. (2012-2013)
  - Associate Editor, Statistics and Its Interface. (01/01/2016-12/31/2018)
- Grant Reviewer

- Ad hoc reviewer for Wellcome Trust, 2015
- National Science Foundation (NSF) review panel, Statistics Program, 2017

## TEACHING ACTIVITIES

- Courses
  - Co-teaching *EPID 323: Design and Analysis with Time-to-Event Data*, Department of Epidemiology, Vanderbilt University (2011 Spring).
  - Teaching *EPID 323-01: Design and Analysis with Time-to-Event Data*, Department of Epidemiology, Vanderbilt University (2012 Spring).
  - Teaching *EPID 332: Advanced Methods For Epidemiology*, Department of Epidemiology, Vanderbilt University (2013 Fall).
  - Teaching *BIOS 323: Applied Survival Analysis*, Department of Biostatistics, Vanderbilt University (2012-2016 Falls).
- Workshops
  - Co-teaching *An Introduction to Missing Data: Multiple Imputation*, Vanderbilt Kennedy Center, Vanderbilt University (2012).
  - Teaching *Adjusting for Treatment Switch in Survival Analysis*, Boehringer-Ingelheim (2015)
- Lectures *Missing Data – When Can You Worry Less*, Continued Education for Staff Statisticians Lecture Series, Department of Biostatistics (June 2011).

## RESEARCH PROGRAM

### Present Funding

|   |                       |           |
|---|-----------------------|-----------|
| <b>U24 CA194215-01A1</b> (PI: Denny)  | 09/01/16 08/31/21     | 15%       |
| NCI   | Role: Co-Investigator |           |
| Biomedical Informatics  |                       |           |
| Advancing Cancer Pharmacoepidemiology Research Through EHRs and Informatics |                       |           |
| <b>5UL1 TR000445-07</b> (PI: Bernard)                                       | 06/27/12-05/31/17     | 10%       |
| NCRR  | Role: Biostatistician |           |
| Medicine  |                       |           |
| The Vanderbilt Institute for Clinical and Translational Research (VICTR)    |                       |           |
| <b>1R01HS021496-01A1</b> (PI: Jackson)                                      | 07/01/2013-06/30/2017 | 5%        |
| AHRQ  | Role: Co-I            | 1,062,220 |
| Pediatric Surgery   |                       |           |
| Personal Health Information Needs and Practices for Maternal Fetal Care     |                       |           |

## Completed Funding

|   |                         |         |
|---|-------------------------|---------|
| <b>R01 AG043419</b> (PI: Talbot)  | 06/10/2013-05/30/2016   | 15%     |
| NIAID   | Role: Co-I              | 750,000 |
| Medicine  |                         |         |
| Effectiveness of the Influenza Vaccine in the Aging Population  |                         |         |
| <b>UNC 5-58358 #</b> (PI: Chen)   | 09/01/2013-8/10/2015    | 10%     |
| University of North Carolina  | Role: PI of subaward    | 31,424  |
| Biostatistics   |                         |         |
| UNC Research Agreement with Amgen Inc.  |                         |         |
| #: Renew annually; subaward from University of North Carolina at Chapel Hill (UNC) through the Center for Innovative Clinical Trials (CICT). Served as consultant during 09/01/2008-08/31/2013. |                         |         |
| <b>R21 HL097334-01A2#</b> (PI: Chen)  | 12/20/2010-11/30/2014   | 25-50%  |
| NHLBI   | Role: PI                | 275,000 |
| Biostatistics   |                         |         |
| A New Approach to Correct Verification Bias Using Auxiliary Information   |                         |         |
| #: No cost extension during 12/01/2012-11/30/2014.  |                         |         |
| <b>1R01LM10828-01</b> (PI: Miller)  | 07/01/2010-09/29/2014   | 0-10%   |
| NLM   | Role: Biostatistician   | 750,000 |
| Biomedical Informatics  |                         |         |
| Evidence-based Diagnostic Tools for Translational and Clinical Research (eTfor2)  |                         |         |
| <b>1R18HS019276-02</b> (PI: Rosenbloom)   | 09/01/2010 08/31/2013   | 10%     |
| AHRQ  | Role: Co-I              | 879,156 |
| Biomedical Informatics  |                         |         |
| Disseminating Adapted Diabetes Evidence to Clinicians Through a Patient Portal  |                         |         |
| <b>5R01CA141307-03</b> (PI: Xu)   | 10/01/2009 - 06/30/2013 | 10-15%  |
| NHLBI   | Role: Biostatistician   | 763,738 |
| Biomedical Informatics  |                         |         |
| An In-silico Method for Epidemiological Studies Using Electronic Medical Records  |                         |         |
| <b>1R18HS018168-03</b> (PI: Johnson)  | 09/30/2009-07/31/2012   | 10%     |
| AHRQ  | Role: Co-I              | 768,659 |
| Biomedical Informatics  |                         |         |
| My MediHealth: A Paradigm for Children-centered Medication Management   |                         |         |
| <b>1K23 AI074830-02*</b> (PI: Creech II)  | 09/04/2008-08/31/2011   | 2.5%    |
| NIH/NIAID/DMID  | Role: Co-I              | 347,475 |
| Infectious Diseases   |                         |         |
| A Longitudinal Study of CA-MRSA Nasal Colonizations in College Sports Participants  |                         |         |
| <b>5R01LM009591-03</b> (PI: Rosenbloom)   | 09/30/2008-09/29/2011   | 5-15%   |
| NIH/NLM   | Role: Co-I              | 607,042 |
| Biomedical Informatics  |                         |         |
| A Framework Based Clinical Documentation Evaluation Method  |                         |         |

|  |                         |            |
|--|-------------------------|------------|
| <b>290-04-0016</b> (PI: Frisse)  | 10/01/2004-09/30/2009   | 10%        |
| State of Tennessee - Federal Formula   | Role: Co-I              | 9,804,010  |
| Biomedical Informatics   |                         |            |
| State and Regional Demonstrations of Health Information Technology   |                         |            |
| <b>5U18 IP000184-03</b> (PI: Griffin)  | 07/01/2008-07/31/2011   | 5%         |
| Centers for Disease Control  | Role: Co-I              | 2,628,223  |
| Preventive Medicine  |                         |            |
| Annual Estimates of Influenza Vaccine Effectiveness: Davidson County, TN                                       |                         |            |
| <b>5R01HL085690-04</b> (PI: Darbar)  | 12/15/2007-11/30/2011   | 5-10%      |
| NHLBI  | Role: Biostatistician   | 1,247,500  |
| Cardiovascular Medicine  |                         |            |
| QT Interval Remodeling in Atrial Fibrillation  |                         |            |
| <b>5K23AI074863-04*</b> (PI: Talbot)   | 03/01/2008-02/28/2013   | 5-15%      |
| NIAID  | Role: Co-I              | 464,800    |
| Infectious Diseases  |                         |            |
| Adult Flu Hospitalizations: Evaluating Diagnostic Methods and Vaccine Effectiveness                            |                         |            |
| <b>N01 AI025462</b> (PI: Edwards)  | 12/01/2005-08/31/2008   | 20%        |
| NIAID  | Role: Co-I              | 8,393,332  |
| Vanderbilt Vaccine Research Program  |                         |            |
| Evaluation of Control Measures Against Diseases other than AIDS/VTEU   |                         |            |
| <b>IHHSN27220080007C*</b> (PI: Edward)   | 11/01/2007-10/31/2014   | 6.37-20%   |
| NIAID  | Role: Co-I              | 15,439,936 |
| Vanderbilt Vaccine Research Program  |                         |            |
| Vaccine and Treatment Evaluation Units (VTEUs): Evaluation of Control Measures Against Disease Other than AIDS |                         |            |
| <b>5P50HL081009-05</b> (PI: Vaughan)   | 05/20/2006-02/28/2012   | 20-34%     |
| NHLBI  | Role: Co-Core Leader    | 10,760,087 |
| Medicine Clinical Pharmacology   |                         |            |
| SCCOR in Hemostatic and Thrombotic Diseases  |                         |            |
| <b>5R01LM007995-06</b> (PI: Miller)  | 06/15/2007 - 06/14/2010 | 9%         |
| NLM  | Role: Co-I              | 687,680    |
| Biomedical Informatics   |                         |            |
| MOMENT (Monitoring for Outpatient Medication Effects and New Toxicities) in TIME                               |                         |            |

\* Funding was transferred to other faculty members because I was over-funded.

## **PUBLICATIONS and PRESENTATIONS**

### **Publications**

Peer-Reviewed Published or To-appear Papers

1. Moul D, Ombao H, Monk T, Chen Q, Begley A, Buysse D. Masking effects of posture and sleep onset on core body temperature have distinct circadian rhythms: results from a 90-min/day protocol. *J Biol Rhythms*. 2002; 17(5): 447-62.
2. Hall M, Vasko R, Buysse D, Ombao H, Chen Q, Cashmere D, Kupfer D, Thayer J. Acute stress affects heart rate variability during sleep. *Psychosom Med*. 2004; 66(1): 56-62.
3. Chen Q, Ibrahim JG. Semiparametric models for missing covariate and response data in regression models. *Biometrics*. 2006; 62(1): 177-84.
4. Joos D, Chen Q, Jirjis J, Johnson KB. An electronic medical record in primary care: impact on satisfaction, work efficiency and clinic processes. *AMIA Annu Symp Proc*. 2006; 394-398. (acceptance rate: < 50%)
5. Dexheimer J, Jones I, Chen Q, Talbot T, Mason D, Aronsky D. Providers' beliefs, attitudes, and behaviors before implementing a computerized pneumococcal vaccination reminder. *Acad Emerg Med*. 2006; 13(12): 1312-8.
6. Chen Q, Zeng D, Ibrahim JG. Sieve maximum likelihood estimation for missing covariates in regression models. *J Am Statist Assoc*. 2007; 102: 1309-18.
7. Devin JK, Blevins LS, Verity DK, Chen Q, Bloodworth JR, Covington J, Vaughan DE. Markedly impaired fibrinolytic balance contributes to cardiovascular risk in adults with growth hormone deficiency. *J Clin Endocrinol Metab*. 2007; 92(9): 3633-9.
8. Chen Q, Ibrahim JG, Chen M-H, Senchaudhuri P. Theory and inference for regression models with missing response and covariates. *J Multivar Anal*. 2008; 99(6): 1302-31.
9. Johnson K, Chark D, Chen Q, Broussard A, Rosenbloom T. Performing without a net: transitioning away from a health information technology-rich training environment. *Acad Med*. 2008; 83(12): 1179-86
10. Shinall MC, Peters TR, Zhu Y, Chen Q, Poehling KA. Potential impact of accelerating the primary series of pertussis vaccine in infants. *Pediatrics*. 2008; 122(5): 1021-6.
11. Halasa N, Gerber M, Chen Q, Wright P, Edwards K. Safety and immunogenicity of trivalent inactivated influenza vaccine in infants. *J Infect Dis*. 2008; 197(10): 1448-54.
12. Devin JK, Vaughan DE, Blevins LS, Chen Q, Covington J, Verity DK, Young PP. Low-dose growth hormone administration mobilizes endothelial progenitor cells in healthy adults. *Growth Horm IGF Res*. 2008; 18(3): 253-63.
13. Zeng D, Chen Q, Ibrahim JG. Gamma frailty transformation models for multivariate survival times. *Biometrika*. 2009; 96(2): 277-91.
14. Janssen KJM, Vergouwe Y, Donders ART, Harrell FE, Chen Q, Grobbee DE, Moons KGM. Dealing with missing predictor values when applying clinical prediction models. *Clin Chem*. 2009; 55(5):994-1001.
15. Miller EK, Khuri-Bulos N, Williams JV, Shehabi AA, Faouri S, Jundi IA, Chen Q, Heil L, Mohamed1 Y, Morin L, Ali A, Halasa NB. Human rhinovirus C associated with wheezing in hospitalized children in the Middle East, *J Clin Virol*. 2009; 46(1):85-9.



16. Talbot HK, Poehling KA, Williams JV, Zhu Y, Chen Q, McNabb P, Edwards KM, Griffin MR. Influenza in older adults: impact of vaccination of school children. *Vaccine*. 2009; 27(13):1923-7.
17. Janssen KJM, Donders ART, Harrell FE, Vergouwe Y, Chen Q, Grobbee DE, Moons KGM. Missing covariate data in medical research: to impute is better than to ignore. *J Clin Epidemiol*. 2010; 63(7):721-7.
18. Zeng D, Chen Q. Adjustment for missingness using auxiliary information in semiparametric regression. *Biometrics*. 2010; 66(1):115-22.
19. Stenner SP, Chen Q, Johnson KB. The impact of an electronic prescribing intervention on generic medication prescribing behavior. *J Am Med Inform Assoc*. 2010; 17(6):681-8.
20. Rosenbloom S, McGregor T, Chen Q, An A, Hsu S, Dupont W. Specialized pediatric growth charts for electronic health record systems: the example of Down Syndrome. *AMIA Annu Symp Proc*. 2010; 687-91. (acceptance rate: < 50%)
21. Petty T, Callahan ST, Chen Q, Edwards KM, Dempsey A. Assessment of parental acceptance of a potential cytomegalovirus vaccine for adolescent females. *Vaccine*. 2010; 28(35):5686-90.
22. Ali SA, Williams JV, Chen Q, Faori S, Shehabi A, Jundi EA, Khuri-Bulos N, Halasa N. Human metapneumovirus in hospitalized children in Amman, Jordan. *J Med Virol*. 2010; 82(6):1012-6.
23. Khuri-Bulos N, Williams JV, Shehabi AA, Faouri S, Al Jundi E, Abushariah O, Chen Q, Ali SA, Vermund S, Halasa NB. Burden of RSV in hospitalized infants and young children in Amman, Jordan. *Scand J Infect Dis*. 2010; 42(5):368-74.
24. Li J, Solus J, Chen Q, Rho YH, Milne G, Stein CM, Darbar D. Role of inflammation and oxidative stress in atrial fibrillation. *Heart Rhythm*. 2010; 7(4):438-44.
25. Talbot H, Griffin M, Chen Q, Zhu Y, Williams J, Edwards K. Effectiveness of seasonal vaccine in preventing confirmed influenza-associated hospitalizations in community dwelling older adults. *J Infect Dis*. 2011; 203(4):500-8.
26. Griffin MR, Monto AS, Belongia EA, Treanor JJ, Chen Q, Chen J, Talbot HK, Ohmit SE, Coleman LA, Lofthus G, Petrie JG, Meece JK, Hall CB, Williams JV, Gargiullo P, Berman LS, Shay DK. Effectiveness of non-adjuvanted pandemic influenza A (H1N1) vaccines in preventing medically attended pandemic influenza virus associated acute respiratory illness in 4 U.S. communities. *PLoS ONE*. 2011; 6(8):e23085.
27. Johnson KB, Unertl KM, Chen Q, Lorenzi NM, Nian H, Mrisse M. Health information exchange usage in emergency departments and clinics: the who, what, and why. *J Am Med Inform Assoc*. 2011; 18(5):690-7.
28. Gadd CS, Ho Y-X, Cala CM, Blakemore D, Chen Q, Frisse M, Johnson KB. Users perspectives on the usability of a regional health information exchange. *J Am Med Inform Assoc*. 2011; 18(5):711-6.
29. Xu H, Fu Z, Shah A, Chen Y, Peterson NB, Chen Q, Mani S, Levy M, Dai Q, Denny J. Extracting and integrating data from entire electronic health records for detecting colorectal cancer cases. *AMIA Annu Symp Proc* 2011; 1564-72.

30. Zeng D, Chen Q, Chen M-H, Ibrahim JG, AMGEN RESEARCH GROUP. Estimating treatment effects with treatment switching via semi-competing risks models: an application to a colorectal cancer study. *Biometrika*. 2011; 99(1):167-184. PMID: 23049136.
31. Frisse M, Johnson K, Nian H, Davidson C, Gadd CS, Unertl K, Turri PA, Chen Q. The financial impact of health information exchange on emergency department care. *J Am Med Inform Assoc*. 2012; 19(3): 328-33.  
**Second most downloaded paper in J Am Med Inform Assoc.**
32. Muldowney JAS, Chen Q, Blakemore DL, Vaughan DE. Pentoxifylline lowers plasminogen activator inhibitor 1 levels in obese individuals: a pilot study. *Angiology*. 2012; 63(6):429-34.
33. Smith JP, Haddad EV, Taylor MB, Oram D, Blakemore D, Chen Q, Boutaud O, Oates JA. Suboptimal inhibition of platelet cyclooxygenase-1 by aspirin in metabolic syndrome. *Hypertension*. 2012; 59(3):719-25.
34. Xu H, Aldrich MC, Chen Q, Peterson NB, Dai Q, Levy M, Shah A, Han X, Li Y, Friedman C, Liu H, Denny JC. Electronic health record data suggests metformin improves cancer survival: A new model for drug repurposing studies. *AMIA Annu Symp Proc.*, 2012; In Press.
35. Liu M, Shah A, Peterson NB, Dai Q, Aldrich MC, Chen Q, Bowton EA, Liu H, Denny JC, Xu H. A study of transportability of an existing smoking status detection module across institutions. *AMIA Annu Symp Proc*. 2012; 577-86. PMID: 23304330.
36. Wu H\*, Chen Q<sup>a</sup>, Ware LB, Koyama T. A Bayesian approach for generalized linear models with explanatory biomarker measurement variables subject to detection limit - an application to acute lung injury. *J Appl Stat*. 2012; 39(8): 1733-1747. PMID: 23049157.  
\* **these two authors contributed equally**; <sup>a</sup> **corresponding author**.
37. Holinstat M, Colowick NE, Hudson WJ, Blakemore D, Chen Q, Hamm HE, Cleator JH. Dichotomous effects of exposure to bivalirudin in patients undergoing percutaneous coronary intervention on protease-activated receptor-mediated platelet activation. *J Thromb Thrombolysis*. 2012; 35(2):209-22. PMID: 23054462.
38. Chen Q, Zeng D, Ibrahim JG, Akacha M, Schmidli H. Estimating time-varying effects for overdispersed recurrent events data with treatment switching. *Biometrika*. 2013; 100(2):339-54.
39. Chen Q, Ibrahim JG. A note on the relationships between multiple imputation, maximum likelihood and fully Bayesian methods for missing responses in linear regression models. *Statistics and Its Interface* 2013; 6(3): 315-24.
40. Chen Q, Chen M-H, Ohlssen D, Ibrahim JG. Bayesian modeling and inference for clinical trials with partial retrieved data following dropout. *Stat Med*. 2013; 32(24): 4180-4195. PMID: 23620446.
41. Talbot HK, Zhu Y, Chen Q, Williams JV, Shay D, Griffin MR. Effectiveness of influenza vaccine for preventing laboratory-confirmed influenza hospitalizations in adults, 2011-2012 influenza season. *Clin Infect Dis*. 2013; 56(12):1774-7. PMID:23449269.
42. Zhang Y, Chen Q, Chen M-H, Ibrahim JG, Zeng D, Pan Z, Xue X. Bayesian analysis of survival data with semi-competing risks and treatment switching. *The 2012 ICSA Appl Stat Symp Proc*. 2013.

43. Mulvaney SA, Ho Y-X, Cala C, Chen Q, Nian H, Patterson B, Johnson KB. Assessing adolescent asthma symptoms and adherence using mobile phones. *J Med Internet Res.* 2013; 15(7): PMID: 23864345.
44. Smith JC, Denny JC, Chen Q, Nian H, Spickard A, Rosenbloom TS, Miller RA. Lessons learned from developing a drug evidence base to support pharmacovigilance. *Applied Clinical Informatics* 2013 Dec 18; 4(4):596-617.
45. Mani S, Ozdas A, Aliferis C, Varol A, Chen Q, Carnevale R, Chen Y, Romano-Keeler J., Nian H., Weitkamp J-H. Medical decision support using machine learning for early detection of late onset neonatal sepsis. *J Am Med Inform Assoc.* 2014; 21(2): 326-36; PMID: 24043317.
46. Silverman H, Ho Y-X, Kaib S, Ellis W, Moffitt M, Chen Q, Nian H, Gadd CS. Training the next generation of physicians: a novel approach to maintaining patient and relationship centered care through EHR ergonomic training and assessment in preclerkship medical education. *Acad Med.* 2014; 89(9): 1230-4.
47. Zhang Y, Chen M-H, Ibrahim JG, Zeng D, Chen Q, Pan Z, Xue X. Bayesian gamma frailty models for survival data with semi-competing risks and treatment switching. *Lifetime Data Anal.* 2014; 20(1): 76-105. PMID: 23543121.
48. Ho Y-X, Chen Q, Nian H, Johnson KB. An assessment of pharmacists' readiness for paperless labeling: a national survey. *J Am Med Inform Assoc.* 2014; 21(1): 43-8. PMID: 23523874.
49. Chen Q, Wu H, Ware LB, Koyama T. A Bayesian approach for the Cox proportional hazards model with covariates subject to detection limit. *International Journal of Statistics in Medical Research* 2014; 3(1): 32-43.
50. Chen Q, May RC, Ibrahim JG, Chu H, Cole SR. Joint modeling of longitudinal and survival data with missing and left-censored time-varying covariates. *Stat Med* 2014 33(26): 4560-76.
51. Zhu H, Ibrahim JG, Chen Q. Bayesian Case-deletion Model Complexity and Information Criterion. *Statistics and Its Interface* 2014; 7(4): 531-542.
52. Fadugba OO, Wang L, Chen Q, Halasa NB. Immune Responses to Pertussis Antigens in Infants and Toddlers after Immunization with Multicomponent Acellular Pertussis Vaccine. *Clin Vaccine Immunol* 2014; 21(12): 1613-9. PMID: 25253666
53. Jia P, Wang Q, Chen Q, Hutchinson KE, Pao W and Zhao Z. Detection and Quantification of Mutation Hotspots Through Mutation Set Enrichment Analysis. *Genome Biol* 2014; 15(10):489. PMID: 25348067
54. Chen Q, Ibrahim JG. A note on the relationships between multiple imputation, maximum likelihood and fully Bayesian methods for missing responses in linear regression models. *Stat Interface.* 2014 Jul 1;6(3):315-324. PMID: 25309677
55. Chen Q, Griffin M.R., Nian H., Zhu Y., Williams J.V., Edwards K.M, Talbot H.K. Influenza Vaccine Prevents Medically Attended Influenza-Associated Acute Respiratory Illness in Adults Aged  $\geq 50$  Years. *J. Infect Dis* 2015 Apr 1;211(7):1045-50. PMID: 25336724
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63. Chen Q, Nian H, Zhu Y, Talbot HK, Griffin MR, Harrell FE. Too many covariates and too few cases? a comparative study. *Statistics in Medicine.* 2016 Nov 10;35(25):4546-58. PMID: 27357163. PMCID:PMC5050102.
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## Presentations

### Invited Presentations

1. Generalized Mixed Model in Splus/R, Western Psychiatric Institute and Clinic, University of Pittsburgh, August, 2001.
2. Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems, University of Connecticut, Storrs, CT, February, 2005.
3. Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems, Vanderbilt University, Nashville, TN, March, 2005.
4. Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems, University of Florida, Gainesville, FL, March 2005.

5. Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems, University of Michigan, Ann Arbor, MI, April 2005.
6. Small Sample and Asymptotic Relationships between Multiple Imputation, Maximum Likelihood and Fully Bayesian Methods for Missing Data in Linear Regression Models, Joint Statistical Meeting, Minneapolis, Minnesota, August 2005.
7. Statistical Modeling – An Example of Respiratory Syncytial Virus (RSV) Study, Meharry University, Nashville, TN, October 2008.
8. Sieve Maximum Likelihood Estimation for Regression Models with Covariates Missing at Random, IMS-China Conference, Weihai, Shangdong, P.R.China, July 2009.
9. An Alternative Double Robust Method for Estimating Population Means from Imcomplete Data, George Mason University, Fairfax, VA, April 2010.
10. Gamma Frailty Transformation Models for Multivariate Survival Times, National University of Singapore, Singapore, May 2010.
11. Estimating treatment effects with treatment switching via semi-competing risks models: an application to a colorectal cancer study. International Chinese Statistical Association, Boston, Massachusetts, June 2012.
12. Estimating treatment effects with treatment switching via semi-competing risks models: an application to a colorectal cancer study. University of Indianapolis, Indianapolis, IN, Nov 2012.
13. Estimating treatment effects with treatment switching via semi-competing risks models: an application to a colorectal cancer study. University of Pittsburgh, Pittsburgh, PA, Nov 2012.
14. Estimating treatment effects with treatment switching via semi-competing risks models: an application to a colorectal cancer study. The University of Texas Health Science Center at Houston, Houston, TX, Jan 2014.
15. Estimating Time-varying Effects for Overdispersed Recurrent Events Data with Treatment Switching. Joint Applied Statistics Symposium of International Chinese Statistical Association & Korean International Statistical Society, Portland, Oregon. (June, 2014)
16. Too Many Covariates and Too Few Cases? University of North Carolina at Chapel Hill, North Carolina, Chapel Hill, August 2015.
17. Treatment Effect Estimate and Model Diagnostics with Time-Varying Treatment Switching, Eastern North American Region, Austin, Texas. (March 2016)
18. Treatment Effect Estimate and Model Diagnostics with Time-Varying Treatment Switching, International Chinese Statistical Association, Atlanta, Georgia, (June 2016)
19. Joint Modeling of Longitudinal and Survival Data with Missing and Left-Censored Time-Varying Covariates, Joint Statistical Meeting, Chicago, Illinois. (August, 2016)

## Contributed Presentations

1. Semiparametric Models for Missing Covariates in Regression Models, Eastern North American Region Meeting, Pittsburgh, PA, March 2004.
2. Semiparametric Models for Missing Covariates in Generalized Linear Mixed Models, Joint Statistical Meeting, Toronto, Canada, August 2004.
3. Small Sample and Asymptotic Relationships between Multiple Imputation, Maximum Likelihood and Fully Bayesian Methods for Missing Data in Linear Regression Models, Eastern North American Region, Austin, TX, March 2005.
4. Sieve Maximum Likelihood Estimation for Missing Covariates in Regression Models, Eastern North American Region, Tampa, Florida, March 2006.
5. Sieve Maximum Likelihood Estimation for Missing Covariates in Regression Models, Joint Statistical Meeting, Seattle, Washington, August 2006.
6. A Bayesian Approach for Generalized Linear Model with an Explanatory Biomarker Measurement Variable Subject to Detection Limit – an Application to Acute Lung Injury. Eastern North American Region, Miami, FL, March 2011.
7. A New Approach to Adjust for Verification Bias in Assessment of Binary Diagnostic Tests. Eastern North American Region, Washington D.C., April 2012.
8. Too Many Covariates and Too Few Cases? – A Comparative Study. Joint Statistical Meeting, San Diego, August 2012.
9. Too Many Covariates and Too Few Cases? – A Comparative Study. Eastern North American Region, Orlando, March 2013.

## Intramural Presentations

1. An Alternative Double Robustness Method for Estimating Population Means from Incomplete Data, October, 2006.
2. Gamma Frailty Transformation Models for Multivariate Survival Times, December, 2009.
3. Too Many Covariates and Too Few Cases? – A Comparative Study, June, 2011.
4. Estimating treatment effects with treatment switching via semi-competing risks models: An application to a colorectal cancer study, May, 2012.
5. Estimating Time-varying Effects for Overdispersed Recurrent Events Data with a Cross-over Design, Jan, 2013.

February 9, 2017