Curriculum Vitae

Qingxia (Cindy) Chen, Ph.D.

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PERSONAL DATA:

Office Address Department of Biostatistics

School of Medicine Vanderbilt University

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EDUCATION:

06/99 BA of Statistics, Department of Statistics and Finance

University of Science and Technology of China, Hefei, China

05/01 Master of Statistics, Department of Statistics

University of Pittsburgh, Pittsburgh, PA

07/05 Doctor of Philosophy 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. Advisor: Joseph G. Ibrahim, coadvisor: Donglin Zeng

ACADEMIC HONORS:

Undergraduate:

09/95 - 06/99 USTC Outstanding Student Scholarship

Graduate School:

09/04 - 05/05 Student Travel Award, University of North Carolina at Chapel Hill

08/04 JSM-SBSS Student Travel Award

TRAINING:

09/2000-08/2001 Research Assistant, Department of Statistics, University of Pittsburgh

05/2001-08/2001 Internship in Western Psychiatric Institute and Clinics, Pittsburgh

08/2001-08/2005 Research Assistant, Department of Biostatistics, University of North Carolina at

Chapel Hill

ACADEMIC APPOINTMENTS:

09/2005-present Assistant Professor (tenure-track), Department of Biostatistics, University of

Vanderbilt

PROFESSIONAL ORGANIZATIONS:

American Statistical Association International Biometric Society

International Society for Bayesian Analysis (ISBA) $\,$

International Chinese Statistical Association (ICSA)

PROFESSIONAL ACTIVITIES:

Intramural Services:

07/09 Committee Member, Jeffrey Thomas Leegon (MS student), with Thesis "A Com-

parison of Bayesian Network Struture Learning Algorithms on Emergency De-

partment Ambulance Diversion Data"

09/05 - Present Committee Member, PhD search committee, Department of Biostatistics

09/08 - Present Committee Member, Graduate School Program, Department of Biostatistics

Extramural Services:

08/05 Session Chair of "Data Augmentation, EM, and Bayesian Methods with Missing

Data", Joint Statistical Meeting, Minneapolis, Minnesota.

03/11 Session Chair of "Adaptive Designs for Clinical Trials", Estern North American

Region, Miami, FL.

Intramural Seminars and Lectures:

10/06 An Alternative Double Robustness Method for Estimating Population Means

from Imcomplete Data

Extramural (Visiting Professorships, Invited Lectureships, Seminars, Presentations and Symposia):

08/01	(Invited presentation) Generalized Mixed Model in Splus/R, Western Psychiatric Institute and Clinic, University of Pittsburgh.
03/04	Semiparametric Models for Missing Covariates in Regression Models, Eastern North American Region Meeting, Pittsburgh, PA.
08/04	Semiparametric Models for Missing Covariates in Generalized Linear Mixed Models, Joint Statistical Meeting, Toronto, Canada.
02/05	(Invited) Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems, University of Connecticut, Storrs, CT.
03/05	(Invited) Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems, Vanderbilt University, Nashville, TN.
03/05	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 Meeting, Austin, TX.
03/05	(Invited) Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems, University of Florida, Gainesville, FL.
04/05	(Invited) Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems, University of Michigan, Ann Arbor, MI.
08/05	(Invited speaker) 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.
03/06	(Contributed) Sieve Maximum Likelihood Estimation for Missing Covariates in Regression Models, Eastern North American Region Meeting, Tampa, Florida.
08/06	(Contributed) Sieve Maximum Likelihood Estimation for Missing Covariates in Regression Models, Joint Statistical Meeting, Seattle, Washington.
10/06	(Invited speaker) An Alternative Double Robust Method for Estimating Population Means from Imcomplete Data, Vanderbilt University, Nashville, TN.
10/08	(Invited speaker) Statistical Modeling – An Example on Respiratory Syncytial Virus (RSV) Study, Meharry University, Nashville, TN.
07/09	(Invited speaker) Sieve Maximum Likelihood Estimation for Regression Models with Covariates Missing at Random, IMS-China Conference, Weihai, Shangdong, P.R.China.
12/09	(Invited speaker) Gamma Frailty Transformation Models for Multivariate Survival Times, Vanderbilt University, Nashville, ${\rm TN}$
04/10	(Invited speaker) An Alternative Double Robust Method for Estimating Population Means from Imcomplete Data, George Mason University, Fairfax, VA.
05/10	(Invited speaker) Gamma Frailty Transformation Models for Multivariate Survival Times, National University of Singapore, Singapore.

03/11

(Contributed) A Bayesian Approach for Generalized Linear Model with an Explanatory Biomarker Measurement Variable Subject to Detection Limit – an Application to Acute Lung Injury. ENAR, Miami, FL.

JOURNAL REVIEWER:

Journal of the American Statistical Association

Biometrics

Journal of the Royal Statistical Society, Series C (Applied Statistics)

Philosophical Transactions of the Royal Society A

Statistics in Medicine

Bayesian Analysis

Journal of Official Statistics

Clinical Trials

Life Data Analysis

Health Services and Outcomes Research Methodology

Statistical Sinica

Mathematical Reviews, A division of the American Mathematical Society

OMICS Publishing Group/Biobio

TEACHING ACTIVITIES:

01/11-05/11	Coteach Epidemiologic 323: Design and Analysis with Time-to-Event Data, Department of Epidemiology, Vanderbilt University
01/05-06/05	Teaching assistant for Advanced Probability and Statistical Inference (II) (BIOS 261), Department of Biostatistics, University of North Carolina at Chapel Hill.
08/04-12/04	Teaching assistant for <i>Statistical Analysis with Missing Data (BIOS 240)</i> , Department of Biostatistics, University of North Carolina at Chapel Hill.
01/04-06/04	Teaching assistant for $Bayesian\ Statistics\ (BIOS\ 231)$, Department of Biostatistics, University of North Carolina at Chapel Hill.
08/03-12/03	Teaching assistant for <i>Principles of Statistical Inference (BIOS 110)</i> , Department of Biostatistics, University of North Carolina at Chapel Hill.
01/01-05/01	Teaching assistant for Statistics and Probability for Business Management (STAT 1100), Department for Statistics, University of Pittsburgh.
08/00-12/00	Teaching assistant for Calculus I (MATH 0200), Department for Statistics, University of Pittsburgh

RESEARCH PROGRAMS:

(Principles Investigator) "A New Approach to Correct Verification Bias Using Auxiliary Information", 1R21HL097334-01A2 funded by NHLBI, 12/20/2010 11/30/2012.

(Co-Investigator) "Disseminating Adapted Diabetes Evidence to Clinicians Through a Patient Portal", 1R18HS019276-01 funded by Agency for Healthcare Research and Quality, 09/01/2010 08/31/2013, (PI: Rosenbloom S.T.)

(Co-Investigator) "An in-silico method for epidemiological studies using Electronic Medical Records", 1R01CA141307-01 funded by NHLBI, 10/01/2009 - 06/30/2013, (PI: Hua Xu)

(Co-Investigator) My MediHealth (PI: Kevin Johnson)

(Co-Investigator) Keipp IDSA grant

(Co-Investigator) "A Longitudinal Study of CA-MRSA Nasal Colonizations in College Sports Participants", K23 A174830-01A funded by NIH/NIAID/DMID, 09/01/2008-06/30/2009, (PI: Creech C.B.)

A Framework Based Clinical Documentation Evaluation Method, R01 LM09591-01A1 funded by NIH/NLM, 11/01/2008-06/30/2010, (PI: Rosenbloom S.T.)

(Co-Investigator) "State and Regional Demonstrations of Health Information Technology", 290-04-0016, 07/01/2008-09/29/2009, (PI: Frisse M.)

(Co-Investigator) "Annual Estimates of Influenza Vaccine", U18 P000184-01 funded by CDC, 08/01/2008-07/31/2009, (PI: Griffin M.)

(Biostatistician) "QT Interval Remodeling in Atrial Fibrillation", R01 HL085690-01A1 funded by NIH/NIAID/DMID, 01/01/2008-11/30/2008, (PI: Dawood D.).

(Co-Investigator) "Adult Flu Hospitalizations: Evaluating Diagnostic Methods and Vaccine Effectiveness", K23 AI074863 funded by NIH/NIAID/DMID, (PI: Talbot H.K.)

(Co-Investigate) "Vaccine Treatment and Evaluation Units", N01 AI25462 funded by NIH/NIAID/DMID (PI: Edward K.)

(Co-Investigate) "Vaccine Treatment and Evaluation Units – Core", N01 A180007 funded by NIH/NIAID/DMID, 09/01/2008-06/30/2009, (PI: Edward K.)

(Co-Core Leader) "SCCOR in Hemostatic and Thrombotic Diseases", 1P50 HL081009-01 funded by NIH/NHLBI, 11/01/2008-06/30/2009, (PI: Vaughan D.E.).

(Biostatistician) "Inpatient Monitoring Using Evidence for Safe and Appropriate Testing", R01 LM007995-03 funded by NIH/NLM, (PI: Miller R.).

BIBLIOGRAPHY:

PEER REVIEWED METHODOLOGY PUBLICATIONS:

- 1. Zeng D., Chen Q., Chen M-H, Ibrahim J.G., the Amgen Research Group (2010) "Estimating Treatment Effects with Treatment Crossovers via Semi-Competing Risks Models: An Application to a Colorectal Cancer Study". Biometrika. Invited revision.
- 2. Janssen, K.J.M., Donders, A.R.T., Harrell, F.E., Vergouwe, Y., **Chen Q.**, Grobbee, D.E., Moons, K.G.M. (2010) "Missing covariate data in medical research: To impute is better than to ignore". J Clin Epidemiol. 63(7):721-7.
- 3. Zeng, D., **Chen Q.*** (2010) "Adjustment for Missingness Using Auxiliary Information in Semiparametric Regression". Biometrics. 66(1):115-22.

 * Corresponding Author.
- 4. Zeng, D., Chen Q., Ibrahim, J. G. (2009) "Gamma frailty transformation models for multivariate survival times". Biometrika. 96(2):277-291.
- 5. Janssen K.J.M., Vergouwe Y., Donders A.R.T., Harrell F.E. Jr., **Chen Q.**, Grobbee D.E., Moons K.G.M. (2009) "Dealing with missing predictor values when applying clinical prediction models". Clin Chem. 2009 May;55(5):994-1001.
- Chen Q., Ibrahim, J. G., Chen, M.-H., Senchaudhuri, P. (2008) "Theory and Inference for Regression Models with Missing Response and Covariates". Journal of Multivariate Analysis. 99(6). 1302-31.
- Chen Q., Zeng, D., Ibrahim, J. G. (2007) "Sieve Maximum Likelihood Estimation for Missing Covariates in Regression Models". Journal of the American Statistical Association. Vol 102, 1309-1318.
- 8. **Chen Q.**, Ibrahim J. G. (2006) "Semiparametric Models for Missing Covariate and Response Data in Regression Models". Biometrics, 62, 177-184.

PEER REVIEWED COLLABORATION PUBLICATIONS:

- 1. Talbot H., Griffin M., Chen Q., Zhu Y., Williams J., Edwards K. (2010) "Effectiveness of Seasonal Vaccine in Preventing Confirmed Influenza-Associated Hospitalizations in Community Dwelling Older Adults". Journal of Infectious Diseases. Accepted.
- 2. Stenner S.P., **Chen Q.**, Johnson K.B. (2009) "The Impact of an Electronic Prescribing Intervention on Generic Medication Prescribing Behavior", AMIA Annu Symp Proc. Accepted.
- 3. Rosenbloom S., McGregor T., Chen Q., An A., Hsu S., Dupont W. (2010) "Specialized Pediatric Growth Charts For Electronic Health Record Systems: the example of Down Sysdrome". AMIA Annu Symp Proc. Accepted.

- 4. Petty, T., Callahan, S.T., **Chen Q.**, Edwards, K.M., Dempsey, A. (2010) "Assessment of Parental Acceptance of a Potential Cytomegalovirus Vaccine for Adolescent Females Vaccine". Vaccine. Accepted.
- Ali SA, Williams JV, Chen Q., Faori S, Shehabi A, Jundi EA, Khuri-Bulos N, Halasa N. (2010) "Human Metapneumovirus in Hospitalized Children in Amman, Jordan". J Medical Virology, 82:1012-6.
- 6. Khuri-Bulos N, Williams JV, Shehabi AA, Faouri S, Al Jundi E, Abushariah O, Chen Q., Ali SA, Vermund S, Halasa NB. (2010) "Burden of RSV in Hospitalized Infants and Young Children in Amman, Jordan", Scand J Infect Dis., 42(5):368-74.
- 7. Li J, Solus J, Chen Q, Rho YH, Milne G, Stein CM, Darbar D. (2010) "Role of inflammation and oxidative stress in atrial fibrillation". Heart Rhythm., 7(4):438-44
- 8. Miller E.K., Khuri-Bulos N., Williams J.V. Shehabi A.A., Faouri S., Jundi I.A., **Chen Q.**, Heil1 L., Mohamed1 Y., Morin L., Ali A., Halasa N.B. (2009) "Human Rhinovirus C Associated with Wheezing in Hospitalized Children in the Middle East", J Clin Virol., 46(1):85-9.
- Talbot H.K., Poehling K.A., Williams J.V., Zhu Y., Chen Q., McNabb P., Edwards K.M., Griffin M.R. (2009) "Influenza in Older Adults: Impact of Vaccination of School Children". Vaccine. 27(13):1923-7.
- Ali YS, Rembold KE, Wills MB, Chen Q, Ayers CR, Rembold CM. (2008) "Clinical significance of mobile carotid echoes". University of Virginia Journal of Medicine. Oct;4:29-34. http://www.healthsystem.virginia.edu/internet/jom/vol4/JoM-v4-Oct-2008.pdf
- 11. Johnson K., Chark D., MSc, **Chen Q.**, Broussard A., Rosenbloom T. (2008) "Performing Without a Net: Transitioning Away From a Health Information Technology-Rich Training Environment". Academic Medicine. 83(12),
- 12. Shinall M.C., Peters T.R. Zhu Y., **Chen Q.**, Poehling K.A. (2008) "Potential Impact of Accelerating the Primary Series of Pertussis Vaccine in Infants". Pediatrics. 122(5), 1021-6.
- Halasa N., Gerber M., Chen Q., Wright P., Edwards K. (2008) "Safety and immunogenicity of trivalent inactivated influenza vaccine in infants". Journal of Infectious Diseases. 197(10), 1448-1454.
- 14. Devin J.K., Vaughan D.E., Blevins L.S., **Chen Q.**, Covington J., Verity D.K., Young P.P. (2008) "Low-Dose Growth Hormone Administration Mobilizes Endothelial Progenitor Cells in Healthy Adults". Growth Hormone and IGF Research. 18(3), 253-263.
- Devin J.K., Blevins L.S., Verity D.K., Chen Q., Bloodworth J.R., Covington J., Vaughan D.E. (2007) "Markedly Impaired Fibrinolytic Balance Contributes to Cardiovascular Risk in Adults with Growth Hormone Deficiency". Journal of Clinical Endocrinology and Metabolism. 3633-3639.
- Joos D., Chen Q., Jirjis J., Johnson KB (2006). "An Electronic Medical Record in Primary Care: Impact on Satisfaction, Work Efficiency and Clinic Processes". AMIA Annu Symp Proc, 394-8.

- 17. Dexheimer J., Jones I., **Chen Q.**, Talbot T., Mason D., Aronsky D. (2006). "Providers Beliefs, Attitutes, and Behaviors Prior to Implementing a Computerized Pneumococcal Vaccination Reminder.". Academic Emergency Medicine. Acad Emerg Med, 13(12), 1312-8.
- 18. Hall M, Vasko R, Buysse D, Ombao H, **Chen Q.**, Cashmere D, Kupfer D and Thayer J. (2004). "Acute Stress Affects Heart Rate Variability During Sleep". Journal of Psychosomatic Medicine, 66, 56-62.
- 19. Moul, D., Ombao H., Monk T., **Chen Q.**, Begley A., Buysse D. (2002). "Masking effects of posture and sleep onset on core body temperature: a circadian rhythm of bedtime temperature drops". Journal of Biological Rhythms, 17, 447-462.

Competing Abstract Accepted:

1. Petty, T., Callahan, S.T., **Chen Q.**, Edwards, K.M., Dempsey, A. (2009) "Assessing parental acceptance of a potential cytomegalovirus vaccine for adolescent females" Society for Adolescent Medicine's 2010. New Investigator Award.