

Chi Hyun Lee, Ph.D.

CONTACT INFORMATION	410 Arnold House 715 North Pleasant Street Amherst, MA 01003-9304	Phone: (413) 545-1934 Email: chihyunlee@umass.edu
RESEARCH INTERESTS	Statistical methods for recurrent event data, complex survival data, and biased sampling designs. Application of survival methods to biomedical and epidemiological research.	
CURRENT POSITION	Assistant Professor of Biostatistics University of Massachusetts - Amherst, MA Department of Biostatistics and Epidemiology School of Public Health and Health Sciences	September 2018 - present
EDUCATION	Ph.D., Biostatistics University of Minnesota - Twin Cities, Minneapolis, MN Dissertation topic: <i>Nonparametric and Semiparametric Methods for Recurrent Gap Time Data</i> Advisor: Xianghua Luo, Ph.D.	August 2015
	M.A., Applied Statistics Yonsei University, Seoul, South Korea	August 2011
	B.A., Applied Statistics and Business Administration Yonsei University, Seoul, South Korea	August 2009
	Exchange Student Program, Business Administration Oklahoma State University, Stillwater, OK	August - December 2007
RESEARCH EXPERIENCE	Postdoctoral Fellow, Biostatistics The University of Texas MD Anderson Cancer Center, Houston, TX Supervisors: Yu Shen, Ph.D. and Jing Ning, Ph.D. <i>Statistical Methods for Complex Survival Data</i>	October 2015 - August 2018
	Research Assistant Division of Biostatistics, University of Minnesota Supervisor: Xianghua Luo, Ph.D. <i>Statistical Methods for Analyzing Data of Recurrent Infections after Hematopoietic Cell Transplantation</i>	September 2012 - August 2015
	Research Assistant School of Dentistry and Division of Biostatistics, University of Minnesota Supervisors: Mike T. John, Ph.D., D.M.D., M.P.H. and James S. Hodges, Ph.D. <i>Temporomandibular Muscle and Joint Disorders Pain Geography</i>	January 2014 - January 2015
	Research Assistant Division of Biostatistics, University of Minnesota Supervisor: Xianghua Luo, Ph.D. <i>Harm Reduction Curve Modeling Using the Biomarkers of Tobacco Exposures</i>	May - August 2012

RESEARCH GRANT
PARTICIPATION

NIH/NCI, 1R03CA187991-01

July 2014 - June 2016

(PI: Xianghua Luo, Ph.D.)

Statistical Methods for Analyzing Data of Recurrent Infections after Hematopoietic Cell Transplantation

Role: Grant proposal review, research assistant

HONORS AND
AWARDS

- Distinguished Student Paper Awards, ENAR Spring Meeting, 2014
- Ph.D. Student Paper Award on Research Day, School of Public Health, University of Minnesota, 2014
- Outstanding Teaching Assistant Award, Division of Biostatistics, University of Minnesota, 2013
- Dean's Ph.D. Scholarship, School of Public Health, University of Minnesota, 2011
- Dean's Honor Roll, Oklahoma State University, 2007
- Scholarship, Shinchon Yondae Association, 2008
- Jinli Scholarship, Yonsei University, Fall 2007 - Spring 2008

REFEREED
JOURNAL
PUBLICATIONS

1. **Lee, C.H.**, Ning, J., Shen, Y. (2018). Model diagnostics for the proportional hazards model with length-biased data. *Lifetime Data Analysis*. doi:10.1007/s10985-018-9422-y.
2. **Lee, C.H.**, Huang, C.-Y., DeFor, T.E., Brunstein, C.G., Weisdorf, D.J., Luo, X. (2017). Semiparametric regression model for recurrent bacterial infections after hematopoietic stem cell transplantation. *Statistica Sinica*. doi:10.5705/ss.202017.0397.
3. **Lee, C.H.**, Huang, C.-Y., Xu, G., Luo, X. (2017). Semiparametric regression analysis for alternating recurrent event data. *Statistics in Medicine*. doi:10.1002/sim.7563.
4. Cao, L., **Lee, C.H.**, Ning, J., Handy, B.C., Wagar, E.A., Meng, Q.H. (2017). Combination of prostate cancer antigen 3 and prostate-specific antigen improves diagnostic accuracy in men at risk of prostate cancer. *Archives of Pathology & Laboratory Medicine*. doi:10.5858/arpa.2017-0185-OA.
5. **Lee, C.H.**, Ning, J., Shen, Y. (2017). Analysis of restricted mean survival time for length-biased data. *Biometrics*. doi:10.1111/biom.12772.
6. Showalter, J., Nguyen, N.D., Baba, S., **Lee, C.H.**, Ning, J., Klein, K., Wahed, M.A., Tholpady, A. (2017). Platelet aggregometry cannot identify uremic platelet dysfunction in heart failure patients prior to cardiac surgery. *Journal of Clinical Laboratory Analysis*. **31**:e22084. doi:10.1002/jcla.22084.
7. **Lee, C.H.**, Luo, X., Huang, C.-Y., DeFor, T.E., Brunstein, C.G., Weisdorf, D.J. (2016). Nonparametric methods for analyzing recurrent gap time data with application to infections after hematopoietic cell transplant. *Biometrics*. **72**, 535-545.

MANUSCRIPTS
UNDER REVIEW

1. **Lee, C.H.**, Ning, J., Kryscio, R.J., Shen, Y. Analysis of combined incident and prevalent cohort data under a proportional mean residual life model. Submitted to *Statistics in Medicine*.

MANUSCRIPTS IN
PREPARATION

1. **Lee, C.H.**, Zhou, H., Ning, J., Liu, D.D., Shen, Y. CoxPhLb: an R package for analyzing length-biased data under Cox model.

PRESENTATIONS **Statistical Conference Meetings**

1. **Lee, C.H.**, Ning, J., Shen, Y. "Restricted mean survival time for right-censored data with biased sampling." *The International Biometric Society Eastern North American Region (ENAR) Spring Meeting*, Atlanta, GA, 2018.
2. **Lee, C.H.**, Luo, X., Huang, C.-Y., Xu, G. "Semiparametric regression analysis for bivariate alternating recurrent event data." *Lifetime Data Science Conference*, Storrs, CT, 2017. Invited talk.
3. **Lee, C.H.**, Ning, J., Shen, Y. "Analysis of restricted mean survival time for length-biased data." *ICSA International Conference*, Shanghai, China, 2016. Invited talk.
4. **Lee, C.H.**, Ning, J., Shen, Y. "Analysis of restricted mean survival time for length-biased data." *Joint Statistical Meetings*, Chicago, IL, 2016.
5. **Lee, C.H.**, Luo, X., Huang, C.-Y., DeFor, T.E., Brunstein, C.G., Weisdorf, D.J. "Semiparametric regression model for recurrent bacterial infections after hematopoietic stem cell transplantation." *ENAR Spring Meeting*, Austin, TX, 2016. Poster presentation.
6. **Lee, C.H.**, Luo, X., Huang, C.-Y. "Modeling gap times between recurrent infections after hematopoietic cell transplant." *ENAR Spring Meeting*, Miami, FL, 2015.
7. **Lee, C.H.**, Luo, X., Huang, C.-Y., DeFor, T.E. "Nonparametric estimation of joint distribution of time from umbilical cord blood transplantation to first infection and gap times between recurrent infections." *ENAR Spring Meeting*, Baltimore, MD, 2014. * Distinguished Student Paper Award.

Annual School of Public Health Research Day

1. **Lee, C.H.**, Luo, X., Huang, C.-Y., DeFor, T.E., Brunstein, C.G., Weisdorf, D.J. "Nonparametric method for analyzing recurrent gap time data with application to infections after hematopoietic cell transplant." University of Minnesota, 2014. * Ph.D. Student Paper Award.
2. **Lee, C.H.**, Luo, X., Huang, C.-Y. "Nonparametric estimation of the joint distribution of time from blood stem cell transplantation to first infection and recurrence times between repeated infections." University of Minnesota, 2013.

Coauthored Conference Presentations/Posters/Abstracts

1. Liang, L., Villalobos, P., **Lee, C.H.**, Ning, J., Mino, B., Wang, W.-L., Canales, J.R., Jazaeri, A.A., Wistuba, I.I., Yemelyanova, A. "Epidermal growth factor receptor (EGFR) expression in vulvar squamous cell carcinoma." *The United States & Canadian Academy of Pathology's (USCAP) 106th Annual Meeting*, San Antonio, TX, 2017.
2. Liang, L., Villalobos, P., **Lee, C.H.**, Ning, J., Mino, B., Wang, W.-L., Canales, J.R., Jazaeri, A.A., Wistuba, I.I., Yemelyanova, A. "PD-L1 expression in vulvar squamous cell carcinoma: immunohistochemical and RNA-based In Situ hybridization analysis." *USCAP 106th Annual Meeting*, San Antonio, TX, 2017.

3. Curry, J.L., Tetzlaff, M.T., Reuben, A., Szczepaniak, R., George, S., Hudgens, C., Ning, J., Lee, C.H., Torres-Cabala, C., Johnson, D., Wargo, J., Prieto, V.G., Diab, A. "Gene expression profiling of dermatologic toxicities from immune checkpoint therapy." *The Society for Immunotherapy of Cancer's (SITC) 32nd Annual Meeting*, National Harbor, MD, 2017.

TEACHING AND
MENTORING
EXPERIENCE

Teaching Assistant

The University of Texas MD Anderson Cancer Center, Houston, TX

GS01 1023 **Survival Analysis** Spring 2017

Doctoral level course; held lab sessions.

University of Minnesota, Minneapolis, MN

PUBH 8442 **Bayes Decision Theory and Data Analysis** Spring 2015

Doctoral level course.

PUBH 7420 **Clinical Trials** Spring 2014

Graded assignments and exams, held office hours.

PUBH 8442 **Bayes Decision Theory and Data Analysis** Spring 2013

Doctoral level course; lectured in class, graded assignments, held office hours.

* Outstanding Teaching Assistant Award.

PUBH 8401 **Linear Models** Fall 2012, 2013

Doctoral level course; graded assignments, held office hours.

PUBH 6451 **Biostatistics 2** Spring 2012

Graded assignments and exams, held office hours.

PUBH 6414 **Biostatistical Methods 1** Fall 2011 - Spring 2012

Online course; graded assignments, held office hours.

PUBH 7430 **Statistical Methods for Correlated Data** Fall 2011

Prepared course materials, graded assignments, held office hours.

Yonsei University, Seoul, South Korea

Introduction to Statistics Fall 2010 - Spring 2011

Lectured in TA sessions (in English), graded assignments and exams.

Exploratory Data Analysis Fall 2010

Graded assignments and exams.

Mathematical Statistics 2 Spring 2010

Held exam review sessions and office hours, graded exams.

Mentorship Program

The Association of Minority Biomedical Researchers (AMBR)

Served as a mentor for two Ph.D. students. Fall 2016 - Summer 2018

Served at a mock Ph.D. candidacy exam committee.

PROFESSIONAL
SERVICE

Statistical Conference Meetings

Contributed Session Chair, "Survival analysis in epidemiology." *The International Biometric Society Eastern North American Region (ENAR) Spring Meeting*, Atlanta, GA, 2018.

Contributed Session Chair, "Survival analysis for clinical trial data." *ENAR Spring Meeting*, Baltimore, MD, 2014.

Journal Editorial Referee

Referee for *Journal of the American Statistical Association*, *Statistics in Medicine*, *Statistics and Probability Letters*, *International Journal of Biostatistics*, *BMC Medical Research Methodology*, *Value in Health*, *Journal of the Korean Statistical Society*.

SOFTWARE
DEVELOPED

- CoxPhLb. An R package to implement statistical methods for length-biased data under Cox model.

SKILLS

Programming R (proficient), FORTRAN (intermediate),
SAS and STATA (prior experience).

Language English (fluent), Korean (native).