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CONTACT INFORMATION	NIH/NICHD 6100 Executive Blvd., Room 7B05L Bethesda, MD 20892	<i>Office:</i> (301) 435-6944 <i>Cell:</i> (614) 531-9776 <i>E-mail:</i> beomseuk.hwang@nih.gov
CURRENT POSITION	<b>Postdoctoral Fellow</b> Biostatistics and Bioinformatics Branch Division of Intramural Population Health Research <i>Eunice Kennedy Shriver</i> National Institute of Child Health and Human Development National Institutes of Health	
RESEARCH INTERESTS	Bayesian modeling, Nonparametric Bayes, Diagnostic accuracy, Order restricted inference, High-dimensional data analysis, Latent class models, Longitudinal data analysis.	
EDUCATION	<b>The Ohio State University</b> , Columbus, OH USA	
	Ph.D., Biostatistics	May 2013
	• Advisor: Michael L. Pennell, Ph.D.	
	M.S., Statistics	June 2008
	<b>Duke University</b> , Durham, NC USA	
	M.A., Economics	May 2005
	<b>Yonsei University</b> , Seoul, Korea	
	M.A., Economics	June 2002
	B.A., Economics	February 2000
PROFESSIONAL EXPERIENCE	<b>Biostatistics and Bioinformatics Branch, Division of Intramural Population Health Research, <i>Eunice Kennedy Shriver</i> National Institute of Child Health and Human Development, National Institutes of Health</b>	
	<i>Postdoctoral Fellow</i>	August 2013 to Present
	• Supervisor: Zhen Chen, Ph.D.	
	<b>Division of Biostatistics, College of Public Health, The Ohio State University</b>	
	<i>Postdoctoral Researcher</i>	June 2013 to August 2013
	• Supervisor: Michael L. Pennell, Ph.D.	
	<b>Institute for Behavioral Medicine Research, The Ohio State University</b>	
	<i>Graduate Research Associate</i>	March 2009 to December 2012
	• Supervisor: Janice Kiecolt-Glaser, Ph.D.	

PROFESSIONAL  
EXPERIENCE  
(CONT.)

**Department of Statistics, The Ohio State University**

*Graduate Teaching Associate* January 2007 to December 2008

- Recitation TA for STAT 135: *Elementary Statistics*  
- Winter 2007/Spring 2007/Winter 2008/Spring 2008/Autumn 2008
- Recitation TA for STAT 245: *Introduction to Statistical Analysis*  
- Autumn 2007
- Grader for STAT 427: *Introduction to Probability and Statistics for Engineering and the Sciences I*  
- Winter 2007/Winter 2008

**Department of Economics, Duke University**

*Teaching Assistant* Autumn 2004

PUBLICATIONS

**Statistics Journals**

**Hwang, B.S.** and Chen, Z. (2015) An integrated Bayesian nonparametric approach for stochastic and variability orders in ROC curve estimation: An application to endometriosis diagnosis. *Journal of the American Statistical Association*. DOI:10.1080/01621459.2015.1023806

**Hwang, B.S.** and Pennell, M.L. (2014) Semiparametric Bayesian joint modeling of a binary and continuous outcome with applications in toxicological risk assessment. *Statistics in Medicine*. **33**, 1162-1175. *JSM 2013 Student/Young Researcher Paper Competition Award*.

**Hwang, B.S.** and Pennell, M.L. Semiparametric Bayesian joint modeling of clustered binary and continuous outcomes with informative cluster size. *Submitted*.

**Hwang, B.S.** and Chen, Z. Order-constrained Bayesian nonparametric modeling of correlated three-way ROC surfaces. *Submitted*.

**Hwang, B.S.** and Chen, Z. Bayesian high-dimensional risk models with latent interactions: Applications in fecundity studies. *In preparation*.

**Hwang, B.S.** and Chen, Z. Bayesian analysis for fitting zero-inflated Poisson model using auxiliary mixture sampling. *In preparation*.

Kim, S., Chen, Z., and **Hwang, B.S.** Bayesian direct modeling of ROC curves with constraints using placement values. *In preparation*.

Liu, D., **Hwang, B.S.** and Chen, Z. Semiparametric estimation of ROC curve with multiple imperfect gold standard. *In preparation*.

**Biomedical Journals**

- Flores, K.F., Robledo, C., **Hwang, B.S.**, Leishear, K., Grantz, K. and Mendola, P. (2015) Does maternal asthma contribute to racial/ethnic disparities in obstetric and neonatal complications? *Annals of Epidemiology*. **25**, 392-397.
- Fagundes, C.P., Glaser, R., **Hwang, B.S.**, Malarkey, W.B. and Kiecolt-Glaser, J.K. (2013) Depressive symptoms enhance stress-induced inflammatory responses. *Brain, Behavior, and Immunity*. **31**, 172-176.
- Kiecolt-Glaser, J.K., Epel, E.S., Belury, M.A., Andridge, R., Lin, J., Glaser, R., Malarkey, W.B., **Hwang, B.S.** and Blackburn, E. (2013) Omega-3 fatty acids, oxidative stress, and leukocyte telomere length: A randomized controlled trial. *Brain, Behavior, and Immunity*. **28**, 16-24.
- Kiecolt-Glaser, J.K., Belury, M.A., Andridge, R., Malarkey, W.B., **Hwang, B.S.** and Glaser, R. (2012) Omega-3 supplementation lowers inflammation in healthy middle-aged and older adults: A randomized controlled trial. *Brain, Behavior, and Immunity*. **26**, 988-995.
- Kiecolt-Glaser, J.K., Christian, L.M., Andridge, R., **Hwang, B.S.**, Malarkey, W.B., Belury, M.A., Emery, C.F. and Glaser, R. (2012) Adiponectin, Leptin and Yoga Practice. *Physiology & Behavior*. **107**, 809-813.
- Fagundes, C.P., Murray, D.M., **Hwang, B.S.**, Gouin, J., Thayer, J.F., Sollers III, J.J., Shapiro, C.L., Malarkey, W.B. and Kiecolt-Glaser, J.K. (2011) Sympathetic and parasympathetic activity in cancer-related fatigue: More evidence for a physiological substrate in cancer survivors. *Psychoneuroendocrinology*. **36**(8), 1137-1147.
- Wallace, M.E., Mendola, P., Chen, Z, **Hwang, B.S.** and Grantz, K. Preterm birth in the context of increasing income inequality. *Under revision*.
- Mendola, P., Wallace, M., **Hwang, B.S.**, Liu, D., Robledo, C., Mannisto, T., Sundaram, R., Sherman, S., Ying, Q. and Grantz, K.L. Preterm birth and air pollution: Critical windows of exposure for women with asthma. *Under revision*.
- Kissell, K.A., Schisterman, E.F., **Hwang, B.S.**, Chen, Z., Perkins, N., Wactawski-Wende, J. and Mumford, S.L. History of adverse pregnancy outcomes and maternal serum anti-Mullerian hormone levels. *Submitted*.
- Kim, S.S., Mendola, P., Zhu, Y., Hinkle, S.N., **Hwang, B.S.** and Grantz, K.L. Maternal obesity and preterm birth among women without pre-pregnancy chronic diseases. *In preparation*.
- Robledo, C., Mendola, P., **Hwang, B.S.**, Chen, Z., Grantz, K.L., Mannisto, T., Zhu, Y. and Liu, D. Autoimmune disease and pregnancy outcomes. *In preparation*.

PRESENTATIONS

**Invited**

Depressive symptoms, omega-3 fatty acids and inflammation in older adults: a randomized controlled trial. *Rush University Medical Center*, Chicago, IL, March 2013.

Semiparametric Bayesian joint modeling of clustered binary and continuous outcomes with informative cluster size. *Brown University*, Providence, RI, March 2013.

Semiparametric Bayesian joint modeling of clustered binary and continuous outcomes with informative cluster size. *Penn State University*, University Park, PA, April 2013.

Semiparametric Bayesian joint modeling of clustered binary and continuous outcomes with informative cluster size. *Biostatistical Modeling Seminar Group, Ohio State University*, Columbus, OH, April 2013.

**Contributed**

Semiparametric Bayesian joint modeling of a binary and continuous outcome (Poster). *Conference on risk assessment and evaluation of predictions*, Washington, D.C., October 2011.

Semiparametric Bayesian joint modeling of a binary and continuous outcome. *ENAR Spring Meeting*, Washington, D.C., April 2012.

Semiparametric Bayesian joint modeling of a binary and continuous outcome (Poster). *OSU/CCF/CWRU Biostatistics joint symposium*, Columbus, OH, May 2012.

Semiparametric Bayesian joint modeling of a binary and continuous outcome with applications in toxicological risk assessment. *Joint Statistical Meetings*, San Diego, CA, July 2012.

Semiparametric Bayesian joint modeling of clustered binary and continuous outcomes with informative cluster size. *ENAR Spring Meeting*, Orlando, FL, March 2013.

Semiparametric Bayesian joint modeling of clustered binary and continuous outcomes with informative cluster size. *Joint Statistical Meetings*, Montréal, Québec, Canada, August 2013.

An integrated Bayesian nonparametric approach for stochastic and variability orders in ROC curve estimation: An application to endometriosis diagnosis. *Joint Statistical Meetings*, Boston, MA, August 2014.

Order-constrained Bayesian nonparametric modeling of correlated three-way ROC surfaces. *ENAR Spring Meeting*, Miami, FL, March 2015

ACADEMIC  
HONORS AND  
AWARDS

Gary Koch Travel Award, Dept. of Statistics, The Ohio State University July 2012  
2013 JSM Student/Young Researcher Paper Competition Award January 2013  
College Fellowship, College of Public Health, The Ohio State University Spring 2013

ACADEMIC  
SERVICES

Journal reviewer for *Biometrics*; *Biostatistics*; *Statistics in Medicine*; *Environmental Science & Technology*.  
Review Editor in *Frontiers in Public Health*.

COMPUTING  
SKILLS

R, C/C++, Matlab, SAS, STATA, Unix/Linux, Windows

PROFESSIONAL  
MEMBERSHIP

American Statistical Association (ASA)  
International Biometric Society (IBS)  
International Society for Bayesian Analysis (ISBA)  
Korean International Statistical Society (KISS)