Curriculum Vitae

BO CAI

Professor of Biostatistics
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EDUCATION

Ph.D. in Statistics	University of Auckland, New Zealand
M.S. in Statistics	Macquarie University, Australia
B.S. in Mathematics	Beijing Normal University, China

Elected Member, International Statistical Institute (ISI)

ACTIVE MAJOR GRANTS

09/30/20 – 09/29/25	*DiCAYA: South Carolina Youth - Component A* (CDC) Role: **Co-I**
09/01/19 – 08/31/24	*SC Muscular Dystrophy Surveillance, Tracking, and Research Network (SC MD STARnet) Component A & Component C* (CDC) Role: **Subcontract PI**
09/30/18 – 06/30/23	*CAPICCOHH: Assessment of Effects on Ocean Health Related Illness and Disease and Development of Prevention Strategies to Better Protect Public Health* (NIH) Role: **Co-I**
09/01/17 – 08/31/22	*Coordinating Center for Research to Promote the Health of Children with Birth Defects and People with Developmental and Other Disabilities* (CDC) Role: **Contact PI**
02/19/20 – 12/31/22	*Developing Methods and Software for Fitting the Cox Proportional Hazards Model to Partly Interval-Censored Data* (NIH) Role: **Co-I**
09/01/19 – 08/31/21	*Effect of the Patient-Centered Medical Home on Geographic and*

Racial Disparities in Health Care Access
(AHRQ)
Role: **Co-I**

SELECTED PUBLICATIONS

1. Pan, C., **Cai, B.**, Wang, L. (2020). "A Bayesian approach for analyzing partly interval-censored data under the semiparametric proportional hazards model", *Statistical Methods in Medical Research*, 29(11), 3192-3204.
2. **Cai, B.** and Bandyopadhyay, D. (2017). "Bayesian semiparametric variable selection with application to dental data", *Statistics in Medicine*, 36(14), 2251-2264.
3. **Cai, B.**, Lawson, A. B., McDermott, S. and Aelion, C.M. (2016). "A Bayesian semiparametric approach with change points for spatial ordinal data", *Statistical Methods in Medical Research*, 25(2), 644-658.
4. Lin, X., **Cai, B.**, Wang, L. and Zhang, Z. (2015). "A Bayesian proportional hazards model for general interval-censored data", *Lifetime Data Analysis*, 21(3), 470-490.
5. Harun, N. and **Cai, B.** (2014). "Bayesian random effects selection in mixed accelerated failure time model for interval-censored data", *Statistics in Medicine*, 33(6), 971-984.
6. **Cai, B.**, Lawson, A., Hossain, M.D., Choi, J., Kirby, R. and Liu, J. (2013). "Bayesian semiparametric model with spatially-temporally varying coefficients selection", *Statistics in Medicine*, 32(21), 3670-3685.
7. **Cai, B.**, Lin, X. and Wang, L. (2011). "The proportional hazards model for current status data using monotone splines", *Computational Statistics and Data Analysis*, 55, 2644-2651.
8. Bottai, M., **Cai, B.** and McKeown, R. E. (2010). "Logistic quantile regression for bounded outcomes", *Statistics in Medicine*, 29(2), 309-317.
9. **Cai, B.,** Dunson, D. B. and Stanford, J. (2010). "Dynamic model for multivariate markers of fecundability", *Biometrics*, 66, 905–913.
10. **Cai, B.**, Meyer, R. and Perron, F. (2008). "Metropolis-Hastings algorithms with adaptive proposals", *Statistics and Computing*, 18(4), 421-433.
11. Chen, A., **Cai, B.**, Dietrich, K., Radcliffe, J. and Rogan, W.J. (2007). "Lead exposure, IQ and behavior in urban 5-to7-year-olds: Does lead affects behavior only by lowering IQ?", *Pediatrics*, 119(3), 650-658.
12. **Cai, B.** and Dunson, D.B. (2007). "Bayesian multivariate isotonic regression splines: applications to carcinogenicity studies", *Journal of the American Statistical Association*, 102, 1158-1171.
13. **Cai, B.** and Dunson, D.B. (2006). "Bayesian covariance selection in generalized linear mixed models", *Biometrics*, 62, 446-457.