

# Statistical and Intelligent Learning for Big Data, Bayesian Analysis, Clinical Trials, Data Mining, Deep Learning

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## Professor Guosheng Yin

Head of Department (2017 Sep – )  
Professor (2014 – present) Department of Statistics & Actuarial Science, University of Hong Kong  
Associate Professor (2009 – 2014) Department of Statistics & Actuarial Science, University of Hong Kong  
Associate Professor (2008 – 2009) Department of Biostatistics, University of Texas M.D. Anderson Cancer Center  
Assistant Professor (2003 – 2008) Department of Biostatistics, University of Texas M.D. Anderson Cancer Center

Ph.D. in Biostatistics (2003), University of North Carolina at Chapel Hill  
World's top 1% of scientists by Thomson Reuters (2015)  
Fellow of American Statistical Association (2013)  
Elected Member of International Statistical Institute (2012)  
UNC-Chapel Hill Distinguished Alumni Award (2009)

Associate Editor (2018 – present) Statistical Analysis and Data Mining  
Associate Editor (2018 – present) Japanese Journal of Statistics and Data Science  
Associate Editor (2013 – present) Journal of American Statistical Association  
Associate Editor (2012 – present) Contemporary Clinical Trials  
Associate Editor (2009 – 2015) Bayesian Analysis

### Selected Short Courses

Adaptive Methods for Modern Clinical Trials 2015 Joint Statistical Meeting, Seattle, USA  
Adaptive Methods for Modern Clinical Trials 2014 Joint Statistical Meeting, Boston, USA  
Clinical Trial Design: Overview and New Development 2012 Osaka University, Osaka, Japan

### Lecture on youtube

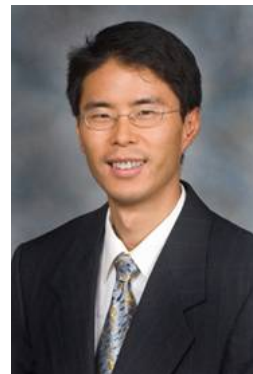
Royal Statistical Society Webinar, 2015, Adaptive Designs  
National University of Singapore Institute for Mathematical Sciences, 2017, NOC Design

### Newly Accepted Papers

Shi, H. and Yin, G. (2018). Bayesian enhancement two-stage design for single-arm phase II clinical trials with binary and time-to-event endpoints. *Biometrics*, in press.  
Dong, F. and Yin, G. (2018). Maximum likelihood estimation for incomplete multinomial data via the weaver algorithm. *Statistics and Computing*, in press.  
Wang, G., Zou, C., and Yin, G. (2018). Change-point detection in multinomial data with a large number of categories. *Annals of Statistics*, in press.  
Lin, R. and Yin, G. (2017). Nonparametric overdose control with late-onset toxicity in phase I clinical trials. *Biostatistics* 18, 180–194.  
Shi, H. and Yin, G. (2017). Bayesian two-stage design for phase II clinical trials with switching hypothesis tests. *Bayesian Analysis* 12, 31–51.  
Lin, R. and Yin, G. (2016). Bootstrap aggregating continual reassessment method for dose finding in drug-combination trials. *Annals of Applied Statistics* 10, 2349–2376.

### Selected Publications

Wu, Y., Ma, Y., and Yin, G. (2015). Smoothed and corrected score approach to censored quantile regression with measurement errors. *Journal of the American Statistical Association* 110, 1670–1683.  
Wu, Y. and Yin, G. (2013). Cure rate quantile regression for censored data with a survival fraction. *Journal of the American Statistical Association* 108, 1517–1531.  
Yuan, Y. and Yin, G. (2011). Robust EM continual reassessment method in oncology dose finding. *Journal of the American Statistical Association* 106, 818–831.  
Yin, G. and Yuan, Y. (2009). Bayesian model averaging continual reassessment method in phase I clinical trials. *Journal of the American Statistical Association* 104, 954–968.  
Yin, G., Li, H., and Zeng, D. (2008). Partially linear additive hazards regression with varying coefficients. *Journal of the American Statistical Association* 103, 1200–1213.  
Yin, G., Zeng, D., and Li, H. (2008). Power-transformed linear quantile regression with censored data. *Journal of the American Statistical Association* 103, 1214–1224.  
Ma, Y. and Yin, G. (2008). Cure rate model with mismeasured covariates under transformation. *Journal of the American Statistical Association* 103, 743–756.  
Zeng, D., Yin, G., and Ibrahim, J. (2006). Semiparametric transformation models for survival data with a cure fraction. *Journal of the American Statistical Association* 101, 670–684.  
Zeng, D., Yin, G., and Ibrahim, J. (2005). Inference for a class of transformed hazard models. *Journal of the American Statistical Association* 100, 1000–1008.  
Zeng, D., Lin, D. Y., and Yin, G. (2005). Maximum likelihood estimation in proportional odds model with random effects. *Journal of the American Statistical Association* 100, 470–483.  
Ro, K., Zou, C., Wang, Z., and Yin, G. (2015). Outlier detection for high dimensional data. *Biometrika* 102, 589–599.  
Wu, Y. and Yin, G. (2014). Conditional quantile screening in ultrahigh-dimensional heterogeneous data. *Biometrika* 102, 65–76.  
Li, H. and Yin, G. (2009). Generalized method of moments for linear regression with clustered failure time data. *Biometrika* 96, 293–306.  
Yin, G. and Cai, J. (2004). Additive hazards model for multivariate failure time data. *Biometrika* 91, 801–818.  
Zou, C., Yin, G., Feng, L., and Wang, Z. (2014). Nonparametric maximum likelihood approach to multiple change-point problems. *Annals of Statistics* 42, 970–1002.  
Liu, S., Yin, G., and Yuan, Y. (2013). Bayesian data augmentation dose finding with continual reassessment method and incomplete observations. *Annals of Applied Statistics* 7, 2138–2156.  
Yuan, Y. and Yin, G. (2011). Bayesian Phase I/II adaptively randomized oncology trials with combined drugs. *Annals of Applied Statistics* 5, 924–942.  
Yin, G. (2009). Bayesian generalized method of moments (with discussion). *Bayesian Analysis* 4, 191–208; and *Rejoinder*, 217–222.  
Yuan, Y. and Yin, G. (2011). Dose-response curve estimation: A semiparametric mixture approach. *Biometrics* 67, 1543–1554.  
Yuan, Y. and Yin, G. (2010). Bayesian quantile regression for longitudinal studies with nonignorable missing data. *Biometrics* 66, 105–114.  
Yin, G. and Yuan, Y. (2009). A latent contingency table approach to dose finding for combinations of two agents. *Biometrics* 65, 866–875.  
Cong, X., Yin, G., and Shen, Y. (2007). Marginal analysis of correlated failure time data with informative cluster sizes. *Biometrics* 63, 663–672.  
Yin, G., Li, Y., and Ji, Y. (2006). Bayesian dose-finding in phase I/II trials using toxicity and efficacy odds ratio. *Biometrics* 62, 777–784.  
Yin, G. (2005). Bayesian cure rate frailty models with application to a root canal therapy study. *Biometrics* 61, 552–558.  
Yin, G. and Ibrahim, J. (2005). A general class of Bayesian survival models with zero and non-zero cure fractions. *Biometrics* 61, 403–412.  
Yin, G. and Shen, Y. (2005). Adaptive design and estimation in randomized clinical trials with correlated observations. *Biometrics* 61, 362–369.  
Yin, G. and Ibrahim, J. (2005). A class of Bayesian shared gamma frailty models with multivariate failure time data. *Biometrics* 61, 209–217.  
Yin, G. and Cai, J. (2005). Quantile regression models with multivariate failure time data. *Biometrics* 61, 152–162.  
Xu, J. and Yin, G. (2014). Two-stage adaptive randomization for delayed response in clinical trials. *Journal of Royal Statistical Society C* 63, 559–578.  
Yin, G., Chen, N., and Lee, J. J. (2012). Phase II trial design with Bayesian adaptive randomization and predictive probability. *Journal of Royal Statistical Society C* 61, 219–235.  
Yin, G. and Yuan, Y. (2009). Bayesian dose finding in oncology for drug combinations by copula regression. *Journal of Royal Statistical Society C* 58, 211–224.  
Ji, Y., Li, Y., and Yin, G. (2007). Bayesian dose finding in phase I clinical trials based on a new statistical framework. *Statistica Sinica* 17, 531–547.



Yin, G. and Ibrahim, J. (2005). Cure rate models: a unified approach. *Canadian Journal of Statistics* 33, 559–570.  
Lee, J. J., Chen, N., and Yin, G. (2012). Worth adapting? Revisiting the usefulness of outcome-adaptive randomization. *Clinical Cancer Research* 18, 4498–4507.  
Yuan, Y. and Yin, G. (2011). On the usefulness of outcome-adaptive randomization. *Journal of Clinical Oncology* 29, e390–e392.