# Curriculum Vitae Truong, Young Kinh-Nhue

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### Education

B.S. in Mathematics, Baccalaureate Honors, University of Washington, Seattle (1978)M.A. in Statistics, University of California, Berkeley (1980)PhD in Statistics, University of California, Berkeley (1985)

# Academic employment

The University of North Carolina at Chapel Hill, Department of Biostatistics, USA Professor, 1998 – present Associate Professor, 1992 – 1998 Assistant Professor, 1985 – 1992

National University of Singapore, Department of Statistics and Applied Probability Director of Statistical Consulting Center, January-July 2003 Professor and Head, January 2001 – July 2002 Professor and Deputy Head, August 1998 – December 2000

Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, NC Associate Director, 2004 – 2005.

## Consulting experience

Statistical consultant, CVR Global Inc., 2009–2017.

### Awards

Regent Fellowship (1980), University of California, Berkeley
Junior Faculty Development Award (1986), University of North Carolina, Chapel Hill.
Research Council Grant (1989, 1992, 1996), University of North Carolina, Chapel Hill.
North Carolina Board of Science and Technology Development Award (1990).
Traveling Grant from National Science Foundation for CBMS (NSF-CBMS 1989)
National Science Foundation Traveling Grant, DMS-89-14344 (1990)
National Science Foundation Grant, DMS-9403800 (1994–1997)
National Institutes of Health Grant, CA61937-01A1 (1994–1997)
National Institutes of Health Grant, CA61937-01A2 (1997–2000)
NSF-SAMSI grant, co-PI (2004–2006, 50%)
National Institutes of Health Grant, R01-A1066920-01, co-PI (2005–2008, 10%)

National Science Foundation Grant, DMS-0707090 (2007–2011) National Science Foundation Grant, DMS-0707090 (2011–2015)

## Publications

Statistics of my publications in google scholar

- Ducharme, G., Jhun, M., Romano, J. and Truong, Y. K. (1985). Bootstrap confidence cones for directional data. *Biometrika* 72 637–45.
- Niazi, M., Mortgat, C. P. and Truong, Y. K. (1985). Probabilistic approach to short- and intermediate-term earthquake forecasting: II Test application to Southern California. *Pure* and Applied Geophysics **123** 653–665.
- Truong, Y. K. (1989). Asymptotic properties of kernel estimators based on local medians. The Annals of Statistics 17 606–617.
- Truong, Y. K. (1991). Nonparametric curve estimation with time series errors. Journal of Statistical Planning and Inference 28 167-183.
- Fan, J., Truong, Y. K. and Wang, Y. (1991). Function estimation involving errors-in-variables. *Nonparametric Functional Estimation and Related Topics*, ed. by G. G. Roussas. NATO ASI Series C: Mathematical and Physical Sciences, vol. 335. Kluwer Academic Publishers, London.
- Siscovick, D., Ekelund, L., Johnson, J., Truong, Y. K. and Adler, A. (1991). Sensitivity of Exercise Electrocardiography for Acute Cardiac Events During Moderate and Strenuous Physical Activity. *Archives of Internal Medicine* 151 325–330.
- Kritchevsky, S. B., Wilcosky, T. C., Morris, D. L. Truong, Y. K. and H.A. Tyroler (1991). Changes in Plasma Lipid and Lipoprotein Cholesterol and Weight Prior to the Diagnosis of Cancer in the Lipid Research Clinics Coronary Primary Prevention Trial. *Cancer Research* 51 3198–3203.
- Truong, Y. K. (1992a). Robust nonparametric time series regression. Journal of Multivariate Analysis 41 163–177.
- Truong, Y. K. (1992b). A nonparametric framework for time series analysis. New Directions in Time Series Analysis, ed. by M. Parzen. Springer, New York.
- Truong, Y. K. and Stone, C. J. (1992). Nonparametric function estimation involving time series. The Annals of Statistics 20 77–97.
- Fan, J. and Truong, Y. K. (1993). Nonparametric regression with errors-in-variables. The Annals of Statistics 21 1900–1925.

- Vine, M. F., Hulka, B. S., Margolin, B. H., Truong, Y. K., Hu, P.-C., Everson, R. B., Schramm, M., Griffith, J. and McCann, M. (1993). Cotinine concentrations in semen, urine and serum of smokers and nonsmokers. *The American Journal of Public Health* 83 1335–1338.
- Truong, Y. K. (1994). Nonparametric time series regression. The Annals of Institute of Statistical Mathematics 46 279–293.
- Truong, Y. K. and Stone, C. J. (1994). Semi-parametric time series regression. Journal of Time Series Analysis 15 405–428.
- Fan, J., Hu, I.-C. and Truong, Y. K. (1994). Robust nonparametric function estimation. Scandinavian Journal of Statistics 21 433–446.
- Truong, Y. K. (1995). Survival time regression involving covariate measurement error. Bulletin of Informatics and Cybernetics 27 31–51.
- Kooperberg, C., Stone, C. J. and Truong, Y. K. (1995a). Hazard regression. Journal of the American Statistical Association 90 78–94.
- Kooperberg, C., Stone, C. J. and Truong, Y. K. (1995b). The L<sub>2</sub> rate of convergence for hazard regression. *Scandinavian Journal of Statistics* 22 143–157.
- Kooperberg, C., Stone, C. J. and Truong, Y. K. (1995c). Logspline estimation of a possibly mixed spectral distribution. *Journal of Time Series Analysis* 16 359–388.
- Kooperberg, C., Stone, C. J. and Truong, Y. K. (1995d). Rate of convergence for logspline spectral density estimation. *Journal of Time Series Analysis* 16 389–401.
- Vine, M., Tse, C.-K., Hu, P.-C. and Truong, Y. K. (1995). Cigarette smoking and semen quality. *Fertility and Sterility* 65 835–842.
- 22. Truong, Y. K. and Patil, P. (1996). On a local property of wavelet estimators involving time series. *Journal of Nonparametric Statistics* **6** 143–156.
- Hall, P., Lahiri, S. N. and Truong, Y. K. (1996). On bandwidth choice for density estimation with dependent data. *The Annals of Statistics* 23 2241–2263.
- Stone, C. J., Hansen, M., Kooperberg, C. and Truong, Y. K. (1997). Polynomial splines and their tensor products in extended linear modeling (with discussion). *The Annals of Statistics*. 25 1371–1470.
- Hamilton, S. A. and Truong, Y. K. (1997). Local linear estimation in partly linear models. Journal of Multivariate Analysis 60 1–19.
- Kelly, E. F., Lenz, J. E., Franaszczuk, P. J. and Truong, Y. K. (1997). A general statistical framework for frequency-domain analysis of EEG topographic structure. *Computers and Biomedical Research* **30** 129–164.

- 27. Robbins, W. A., Vine, M. F., Truong, Y. K. and Everson, R. B. (1997). Use of FISH (fluoescence in situ hybridization) to assess effects of smoking, caffeine and alcohol on aneuploidy load in sperm of healthy men. *Environmental and Molecular Mutagenesis.* **30** 175–183.
- Kooperberg, C., Stone, C. J. and Truong, Y. K. (1998). Hazard Regression (Polynomial Splines in Survival Analysis). In "Encyclopedia of Statistical Sciences" (Samuel Kotz, Campbell B. Read and David L. Banks editors), Update Volume 2, 302-305. Wiley, New York.
- Scott, R. S., Truong, Y. K. and Vos, J. H. (1998). Replication initiation and elongation fork rates within a differentially expressed human multicopy locus in early S phase. *Nucleic Acids Research.* 25 4505–4512.
- HT Kim and YK Truong. (1998). Nonparametric Regression Estimates with Censored Data: Local Linear Smoothers and Their Applications. *Biometrics* 54 213–223.
- B Masse and YK Truong (1999). Conditional logspline models. Canadian J. Statistics 27 819–832.
- 32. GJ Mihlan, LA Todd, KNY Truong (2000). Assessment of Occupational Exposure Patterns by Frequency-Domain Analysis of Time Series Data. Applied Occupational and Environmental Hygiene 15(1) 120–130.
- Huang, J., Kooperberg, C., Stone, C. J. and Truong, Y. (2000). Functional ANOVA models for proportional hazards regression. *Annals of Statistics* 28 961–999.
- 34. Truong, Y. K., Liang, F., Sanderson, P. G., Taylor, D. and Liew, S. C. (2000). Monitoring variations in turbid waters draining modified wetlands in southeast Sumatra, Indonesia: A functional data analytic approach. In *Nonparametric approach to Knowledge Discovery*. Nara, Japan, December 14–17, 2000. Proceedings.
- Truong, Y. K. and Patil, P. (2001). Asymptotics for wavelet based estimates of piecewise smooth regression for stationary time series. *The Annals of Institute of Statistical Mathematics*. 53 159–178.
- 36. Liang, F., Truong, Y. K. and Wong, H. W. (2001). Bayesian variable selection in linear regression with an extension to Bayesian curve fitting. *Statistica Sinica*. **11** 1005–1029.
- Truong, Y. K., Scott, R. S. and Vos, J. H. (2002). The origin of DNA replication and Fieller's problem. *Statistics in Medicine*. 21, 3571–3582.
- 38. Lin Qiao, Wang Miqu, Zhang Jingyuan (Truong K Young) (2002). Analysis on the Art of Chinese Health Preserving: Physical and Breathing Exercise (Daoyin) and the Exercises Taiji Boxing. US Chinese Health and Hygiene Journal. 5:4, 32-37.
- 39. Wang Miqu, Truong Young K, Ding Weijun, Li Min, Wang Gang, Zhang Louxin, Liang Faming, Zhang Wei, Wu Bin, Feng Ren (2002) Some thoughts on Cluster Analysis of Microarray Data at COLD syndrome. Chinese Journal of Traditional Medicine. 8 62-

- 40. Wang Miqu, Wu Bin, Zhang Wei, Zhou Wen-xuan, Jian Zhi-han, Zhou Wei-Ping and Truong Young K (2002). Influence of Kidney-Tonifying Agent on Biochemical Indexes of Chronic Renal Failure in Modeled Rats. ACTA Universitatis Traditions Medicalis Sinensis Pharmacologiaeque Shanghai. 16 37-39.
- 41. Simmons, S. J., Lin, X., Beecher, C., Truong, Y. and Young, S. S. (2004). Active and passive learning to explore a complex metabolism data set. *Proceedings of 2004 Meeting of International Federation of Classification Societies.*
- 42. Truong, Y., Lin, X., Beecher, C., Cutler, A. and Young, S. (2004). Learning a complex metabolomic dataset using random forests and support vector machines. *Knowledge Discovery* and Data Mining, Seattle, Washington, 2004.
- 43. Deng, S., Chu, T. and Wolfinger, R., Truong, Y. (2005). Statistical Analysis of Microarray Data. *Encyclopedia of Genomics, Proteomics and Metabolomics* Wiley, New York.
- Huang, X., M. M. Lewis, P. Bai, D. Smith, Truong, Y. (2007). Task specific influences of Parkinson's disease on the striato-thalamo-cortical and cerebello-thalamo-cortical motor circuitries. *Neuroscience* 147(1): 224–235.
- 45. McKeown, M. J., Li, J., Huang, X., Lewis, M. M., Rhee, S., Truong, Y. K., Wang, J. Z. (2007). Local Linear Discriminant Analysis (LLDA) for Group and Region of Interest (ROI)-based fMRI analysis. *NeuroImage* 37(3): 855–865.
- 46. Daniels, M., Truong, Y. et al. (2007). Dietary diversity scores can be improved through the use of portion requirements: an analysis in young Filipino children. *European Journal of Clinical Nutrition* (in press).
- 47. "Application of Spline Proportional Hazard Model with Time-Dependent Covariates to the Hisayama Data," (with A. Kawaguchi, K. Yonemoto, Y. Tanizaki, Y. Kiyohara and T. Yanagawa, 2008). Statistics in Medicine, 27 3515–3527.
- 48. P. Bai, H. Shen, X. Huang and Y. Truong (2008). A Supervised Singular Value Decomposition for Independent Component Analysis of fMRI. *Statistica Sinica*, **18**, 1233–1252.
- "Statistical Analysis on a Complex Metabolomic Dataset," (with X. Lin, S. Simons, C. Beecher and S. Young, 2008). Frontiers of Biostatistics and Bioinformatics, USTC Press, S. Ma and Y. Wang, eds.
- P. Bai, X. Huang, Y. Truong (2009). Nonparametric Estimation of Hemodynamic Response Function: A Frequency Domain Approach. *Optimality: The Third Erich L. Lehmann Sympo*sium. Institute of Mathematical Statistics, IMS Lecture Notes Monograph Series, 57 190–215.
- A. Calhoun, S. Ford, C. Millen, A. Finkel, Y. Truong and Y. Nie (2010). The prevalence of neck pain in migraine. *Headache*, 50, 1273–1277.

- 52. Y. Truong (2010). Discussion of 'Identification and Estimation of Nonlinear Models using Two Samples with Nonclassical Measurement Errors' by Carroll et al., *Journal of Nonparametric Statistics* 22 415–418.
- 53. S. Sen, A. Kawaguchi, Y. Truong, M.M. Lewis, X. Huang (2010). Dynamic changes in cerebello-thalamo-cortical motor circuitry during progression of Parkinson's disease Purchase the full-text article. *Neuroscience*. 166:2, 412–419.
- 54. P. Bai, H. Shen, J. Huang and Y. Truong (2010). Adaptive SPM for fMRI. Statistics and Its Interface 3 33–43.
- 55. Lewis, MM, Du, G, Sen, S, Kawaguchi, A, Truong, Y, Lee, S, Mailman, RB, and Huang, X. (2011). Differential involvement of striato- and cerebello-thalamo-cortical pathways in tremorand akinetic/rigid-predominant Parkinson's disease. *Neuroscience* Jan 4, 2011 epub PMID: 21211551.
- 56. S. Lee, H. Shen, Y. Truong, M. Lewis, X. Huang (2011). Independent Component Analysis Involving Auto-correlated Sources with an Application to Functional Magnetic Resonance Imaging. *Journal of the American Statistical Association*, 106, 1009-1024, 2011.
- Kawaguchi, A. and Truong, K. Y. (2011). Logspline independent component analysis. Bulletin of Informatics and Cybernetics 43: 83–94.
- Kawaguchi, A., Truong, K. Y. and Huang, X. (2012). Application of Polynomial Spline Independent Component Analysis to fMRI Data. In *Independent Component Analysis for Audio* and Biosignal applications, Ed. G. R. Naik, ISBN 978-953-51-0782-8. pdf
- Lin, FC, Truong, Y and Fine, J. (2013). Robust analysis of semiparametric renewal process models. *Biometrika*. doi: 10.1093/biomet/ast011 pdf
- 60. D. Wang, H. Shen and Y. Truong (2014). Group Blind Source Separation (GBSS). International Work-Conference on Time Series Analysis II, Proceedings, Granada, Spain. http://itise.ugr.es/2014/index.php
- Chen, W., Shen, H. and Truong, Y. (2015). Spatio-Temporal Modeling for fMRI Data. International Work-Conference on Time Series Analysis III, Proceedings, Granada, Spain. http://itise.ugr.es/
- 62. Zhang, L., Wang, M., Sterling, N. W., Lee, E-Y., Eslinger, P. J., Wagner, D., Du, G., Lewis, M. M., Truong, Y., Bowman, F. D., Huang, X. (2015). Cortical Thinning and Cognitive Impairment in Parkinson's Disease Without Dementia. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*.
- Chen W., Shen H., Truong Y.K. (2016). Spatio-Temporal Modeling for fMRI Data. In: Rojas I., Pomares H. (eds) *Time Series Analysis and Forecasting. Contributions to Statistics*. pp 293-311. Springer, Cham https://link.springer.com/chapter/10.1007/978-3-319-28725-6\_22

- Zhang, R., Lin, S., Shen, H. and Truong, Y. (2016). Statistical Modeling of Neural Spike Train Data. *Statistical Techniques for Neuroscientists*. Taylor & Francis, NY, USA.
- Zhang, R., Lin, S., Shen, H. and Truong, Y. (2016). Regression Spline Model for Neural Spike Train Data. *Statistical Techniques for Neuroscientists*. Taylor & Francis, NY, USA.
- 66. Chen, W., Shen, H. and Truong, Y. (2016). A Hypothesis Testing Approach for Brain Activation. *Statistical Techniques for Neuroscientists*. Taylor & Francis, NY, USA.
- Chen, W., Shen, H. and Truong, Y. (2016). An Efficient Estimate of HRF. Statistical Techniques for Neuroscientists. Taylor & Francis, NY, USA.
- Wang, D., Shen, H. and Truong, Y. (2016). Group Independent Component Analysis: a Review. Statistical Techniques for Neuroscientists. Taylor & Francis, NY, USA.
- Wang, D., Shen, H. and Truong, Y. (2016). Group Blind Source Separation (GBSS). Statistical Techniques for Neuroscientists. Taylor & Francis, NY, USA.
- 70. Halevy, A. and Truong, Y. (2016). Supervised SVD of fMRI Data with a Time Varying Frequency. *Statistical Techniques for Neuroscientists*. Taylor & Francis, NY, USA.
- Lee, S., Shen, H. and Truong, Y. (2016). Colored Independent Component Analysis. Statistical Techniques for Neuroscientists. Taylor & Francis, NY, USA.
- P. Zanini, H. Shen and Y. Truong (2016). Understanding Resident Mobility in Milan through Independent Component Analysis of *Telecom Italia* Mobile Usage Data. Ann. App. Statist. 10 812–833.
- Wang, D., Shen, H. and Truong, Y. (2016) Efficient Dimension Reduction for High-Dimensional Matrix-valued Data. *Neurocomputing*, 25–34. DOI information: 10.1016/j.neucom.2015.12.096
- 74. Kang, S. Rogers, J. L., Monteith, A. J., Jiang, C., Schmitz, J., Clarke, S. H., Tarrant, T. K., Diaz, M., Fedoriw, Y., Truong, Y. and Barbara J. Vilen (2016). Apoptotic debris accumulates on hematopoietic cells and promotes disease in 2 murine and human SLE. *The Journal of Immunology*.
- 75. Billard MJ, Fitzhugh DJ, Parker JS, Brozowski JM, McGinnis MW, Timoshchenko RG, Serafin DS, Lininger R, Klauber-Demore N, Sahagian G, Truong YK, Sassano MF, Serody JS, Tarrant TK. (2016). G protein coupled receptor kinase 3 regulates breast cancer migration, invasion, and metastasis. PLoS One. 2016 Apr 6;11(4):e0152856. doi: 10.1371/journal.pone.0152856.
- 76. Moss, J. L., Reiter, P. L., Truong, Y. K., Rimer, B. K., & Brewer, N. T. (2016). School entry requirements and coverage of non-targeted adolescent vaccines. *Pediatrics*.
- 77. Swanson, Meghan R.Piven, J. et al. (2017). Subcortical Brain and Behavior Phenotypes Differentiate Infants With Autism Versus Language Delay. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, Volume 2, Issue 8, 664–672.

- 78. Qiao, M., Truong, K. N. and Franz, J. R. (2018). Does local dynamic stability during unperturbed walking predict the response to balance perturbations? An examination across age and falls history. *Gait and Posture*, **62** 80–85.
- Nethery, R. C., Campbell, A. M. and Truong, Y. (2018). Assessing EEG Resting State Connectivity using Independent Component Analysis. 7th Annual International Conference on Cognitive and Behavioral Psychology (CBP 2018). http://www.cognitive-behavior.org/
- Nethery, R. C. and Truong, Y. (2018). On Statistical Inference for Independent Colored Sources Analysis. *ITISE 2018: International Conference on Time Series and Forecasting*, Granada, Spain, September 19–21, 2018.
- 81. Mohan V, Wade SD, Sullivan CS, Kasten MR, Sweetman C, Stewart R, Truong Y, Schachner M, Manis PB, and Maness PF. (2019). Close Homolog of L1 Regulates Dendritic Spine Density in the Mouse Cerebral Cortex through Semaphorin 3B. *Journal of Neuroscience* 39: 6233-6250. PMID: 1182634 PMC6687901
- Sullivan CS, Mohan V, Manis PB, Moy SS, Truong Y, Duncan BW, Maness PF. (2020). Developmental Regulation of Basket Interneuron Synapses and Behavior through NCAM in Mouse Prefrontal Cortex. *Cerebral Cortex* 30: 4689-4707. PMID:32249896
- S. S. Meera, K. Donovan, J. J. Wolff, L. Zwaigenbaum, J. T. Elison, Truong K., M. D. Shen, A. M. Estes, H. C. Hazlett, L. R. Watson, G. T. Baranek, M. R. Swanson, T. St. John, C. A. Burrows, R. T. Schultz, S. R. Dager, K. N. Botteron, J. Pandey, J. Piven (2020). Towards a Data Driven Approach to Screen for Autism Risk at 12 Months of Age, J. A. Academy of Child & Adolescent Psychiatry ISSN 0890-8567, https://doi.org/10.1016/j.jaac.2020.10.015
- Lee, S. Shen, H. and Truong, Y. (2021). Sampling Properties of Color Independent Component Analysis. J. Multivariate Analysis 181, 1–12.
- Bryce W. Duncan, Vishwa Mohan, Sarah D. Wade, Y. Truong, Alex Kampov-Polevoi, Brenda R. Temple, and Patricia F. Maness. "Semaphorin3F Drives Dendritic Spine Pruning through Rho-GTPase Signaling." PMID: 33856648 PMCID: PMC8555654 DOI: 10.1007/s12035-021-02373-2 Molecular Neurobiology, 2021.
- 86. Zürcher, N.R., Walsh, E.C., Phillips, R.D., Cernasov, P.M., Tseng, C.-E.J., Dharanikota, A., Smith, E., Li, Z., Kinard, J.L., Bizzell, J.C., Greene, R.K., Dillon, D., Pizzagalli, D., Izquierdo-Garcia, D., Lalush, D., Truong, K., Hooker, J.M., and Dichter, G.S. (in press). A Simultaneous [11C]Raclopride Positron Emission Tomography and Functional Magnetic Resonance Imaging Investigation of Striatal Dopamine Binding in Autism; PMID: 33431841 PMCID: PMC7801430 DOI: 10.1038/s41398-020-01170-0 Translational Psychiatry, 2021
- P. Cernasov, Erin C. Walsh, J. L. Kinard, Lisalynn Kelley, Rachel Phillips, Angela Pisoni, Tory A. Eisenlohr-Moul, Macey Arnold, Sarah C. Lowery, Marcy Ammirato, Kinh Truong, Gabriela A. Nagy, Jason A. Oliver, Kevin Haworth, Moria Smoski (2021). Multilevel Growth Curve

Analyses of Behavioral Activation for Anhedonia (BATA) and Mindfulness-Based Cognitive Therapy Effects on Anhedonia and Resting-State Functional Connectivity: Interim Results of a Randomized Trial. PMID: 34126308 PMCID: PMC8282772 DOI: 10.1016/j.jad.2021.05.054 *Journal of Affective Disorders*, 2021.

- 88. Girault, J.B., Donovan, K., Hawks, Z., Talovic, M., Forsen, E., Elison, J.T., Shen, M.D., Swanson, R., Wolff, J.J., Kim, S.H., Nishino, T., Davis, S., Snyder, A.Z., Botteron, K.N., Estes, A.E., Dager, S.R., Hazlett, H.C., Gerig, G., McKinstry, R.C., Pandey, J., Schultz, R.T., St. John, T., Zwaigenbaum, L., Todorov, A., Truong, Y., Styner, S., Pruett, Jr., J.R., Constantino, J.H., & Piven, J for the IBIS Network. (2022) Brain imaging markers of inherited liability for autism implicate infant visual regions and pathways. *The American Journal of Psychiatry*. https://doi.org/10.1176/appi.ajp.21101002
- Burrows, C. A., Grzadzinski, R. L., Donovan, K., Stallworthy, I. C., Rutsohn, J., John, T. S., ... & IBIS Network. (2022). A data-driven approach in an unbiased sample reveals equivalent sex ratio of autism spectrum disorder-associated impairment in early childhood. *Biological* psychiatry, 92(8), 654–662.
- 90. Grzadzinski, R., Jatkar, A., Donovan, K., Truong, K., Holbrook, A., Lord, C., & Kim, S. H. (2022). Examining Treatment Outcomes Across Contexts: How Do Child Baseline Characteristics Impact Measurement of Treatment Response?. Journal of Autism and Developmental Disorders, 1–11.
- Lee, S., Shen, H. and Truong, Y.K. (2022). Nonparametric Independent Component Analysis for the Sources with Mixed Spectra. arXiv:2212.06327 https://arxiv.org/abs/2212.06327

# Books

- Truong, Y. and Lewis, M. (2016). Statistical Techniques for Neuroscientists. Taylor & Francis, NY, USA.
- 2. Truong, Y. and Sarfraz, M. (2018). *Topics in Splines and Applications*. InTech. https://www.intechopen.com/books/topics-in-splines-and-applications

#### Software Packages

- Lee, S., Shen, H., Truong, Y. and Zanini, P. (2015). R Package: Implementation of Colored Independent Component Analysis and Spatial Colored Independent Component Analysis. https://cran.r-project.org/web/packages/coloredICA/index.html http://crantastic.org/packages/coloredICA
- Kooperberg, C., Stone, C. and Truong, Y. (1995). R Package: polspline: Polynomial Spline Routines. https://cran.r-project.org/web/packages/polspline/index.html

# Papers Under Revision

- 1. Shelton, A. D., Mercer, V.S., Katherine R. Saul, Y.K. Truong, and J. R. Franz (2024). The Effects of Gluteus Medius Fatigue on Gait Instability in Older Adults. (under review)
- 2. IBIS Network (2024). Brain Volumes, Cognitive, and Adaptive Skills in School-Age Children with Down Syndrome. (Under review)
- 3. Truong, Y. (2024). Flexible Intensity Function Estimation. (Under revision)
- Lee, S. Shen, H. and Truong, Y. (2024). Nonparametric Independent Component Analysis. (Under revision for JRSS-B)
- 5. Assessment of Pupillometric and Eye Tracking Data for Social Arousal in Infants with a Low Likelihood of Developing Autism Spectrum Disorder (J. Rutsohn, et al. 2023)
- Using Pupil Data to Estimate Arousal in Adults During a Stress Task (J. Rutsohn, et al., 2023)
- 7. The Conditional Hazard Function of Joint Latent Class Mixed Models using Hazard Regression for Longitudinal Cohorts in Psychology (J. Rutsohn et al., Under Review)
- White Matter Development and Language Abilities During Infancy in Autism Spectrum Disorder (J. Rutsohn, et al., 2023)

#### **Books Published Online**

 Hansen, M., Huang, J., Kooperberg, C., Stone, C. J., and Truong, Y. K. (2004). Statistical Modeling with Splines. http://kooperberg.fhcrc.org/monopdf/mono.html

#### Manuscripts

- 1. Truong, Y. K. (2023). Extended linear modeling in function estimation for left-truncated and right-censored data with applications to AIDS studies. (Revised for resubmission)
- R. Zhang, H. Shen, Y. Truong (2023). Regression Spline Model for Neural Spike Train Data. (Revised for resubmission)
- 3. Truong, Y. K. (2023). Asymptotics for hazard regression. (Under revision)
- 4. Truong, Y. K. (2023). Logspline density estimation in the presence of length bias. (Under revision)
- 5. Truong, Y. K. (2023). Extended linear modeling in the presence of selection bias. (Under revision)
- 6. Truong, Y. K. (2023). Extended linear modeling in the presence of random truncation. (Under revision)

- Truong, Y. K. and Yanagawa, T. (2023). Survival time regression in the presence of measurement errors. (Under revision)
- 8. Truong, Y. K. (1997). Deconvolution problems in time series.
- 9. Kim, H. and Truong, Y. K. (1997). Nonparametric regression estimates with censored data: local linear smoothers and their applications. (Manuscript)
- 10. Truong, Y. K. and Radu, R. (1997). Bootstrapping hazard regression estimates. (Manuscript)
- 11. Liu, S., Shen, Z. and Truong, Y. K. (2001). Multi-level Analysis and Surface Fitting. (Manuscript)
- 12. Deng, S., Chu, T. and Wolfinger, R., Truong, Y. (2005). Should We Use Intensity or Intensity Ratio in the Differential Expression Analysis of Two-Channel Microarray Data? (Manuscript)
- Deng, S., Truong, Y., Nobel, A., Perou, C., and Marron, S. (2004). Comparison of Gene Selection Methods in Tumor Subclass Prediction Using Microarray Gene Expression Data -Accuracy, Consistency and Robustness.

#### **Books in preparation**

- 1. Truong, Y. (2023–2024). Statistical Feature Extraction. To sign wih Springer, NY.
- 2. Truong, Y. K. (2019–2024). A First Course in Time Series.
- 3. Truong, Y. K. (2019–2024). Multivariate Statistical Analysis.

#### Invited professional presentations

- 1. <u>Keynote speaker</u> The 5th International Biometric Society-East Asia Regional Biometric Conference (EAR-BC), Kyushu University, Fukuoka, Japan. Dec 20–22, 2015. Keynote Speaker
- <u>Invited speaker</u>, "Asymptotic Properties of Nonparametric Prediction," presented at the Department of Statistics, University of North Carolina at Chapel Hill, February 1986.
- 3. <u>Invited speaker</u>, "Nonparametric Regression and Prediction: A Survey," presented at ASA Chapter of North Carolina, April 1986.
- 4. Colloquium speaker, "Graphical Methods," presented at School of Public Health, University of North Carolina at Chapel Hill, December 1987.
- <u>Invited speaker</u>, "Nonparametric Prediction in Time Series," Institut f
  ür Gesellschafts und Wirtschaftswissenschaften, Universit
  ät Bonn, February 1988.
- <u>Invited speaker</u>, "Nonparametric Regression and Prediction: A Survey," presented at Department of Biostatistics, School of Hygiene and Public Health, Johns Hopkins University, March 1988.

- 7. <u>Invited speaker</u>, "Semiparametric Repeated Measurement Models," presented at the Department of Statistics, North Carolina State University, April 1989.
- Invited speaker, "Nonparametric Function Estimation Involving Time Series," presented at the National Science Foundation for Conference Board on Mathematical Sciences (NSF-CBMS): Regional Conference on Function Estimation in the Context of Independent and Dependent Observations. University of California at Davis, June 1989.
- 9. <u>Invited speaker</u>, "A Nonparametric/Semi-parametric Framework for Time Series Analysis," presented at the Division of Statistics, University of California at Davis, June 1989.
- 10. <u>Invited speaker</u>, "A Nonparametric/Semi-parametric Framework for Time Series Analysis," presented at the Department of Statistics, Stanford University, July 1989.
- <u>Invited speaker</u>, "Semiparametric Repeated Measurement Models," presented at the Division of Biometry and Medical Informatics, Department of Community and Family Medicine, Duke University, January 1990.
- 12. Colloquium speaker, "A Nonparametric Framework for Time Series Analysis," Department of Statistics, University of North Carolina at Chapel Hill, February 1990.
- <u>Invited speaker</u>, "Nonparametric Curve Estimation with Correlated Errors," presented at ASA Chapter of North Carolina, May 16, 1990.
- Invited speaker, "A Nonparametric Framework for Time Series Analysis," presented at the Summer International Interdisciplinary Workshop On Time Series Analysis. Institute for Mathematics and Its Applications at University of Minnesota, July 1–July 20, 1990.
- 15. <u>Invited speaker</u>, "Nonparametric Function Estimation Involving Errors-in-variables," presented at the NATO Advanced Study Institute Scientific Program on Nonparametric Functional and Related Topics. Spetses, Greece, July 30–August 10, 1990.
- <u>Invited speaker</u>, "A Nonparametric/Semi-parametric Framework for Time Series Analysis," presented at the Institute of Applied Mathematics, University of Heidelberg, W. Germany. August 28, 1990.
- <u>Invited speaker</u>, "Deconvolution Problems in Time Series," presented at the Conference on *Discrete Choice Models*, Center for Operational Research and Econometrics, Universite Catholique de Louvain, Belgium, November 12–14, 1990.
- <u>Invited speaker</u>, "Deconvolution Problems in Time Series," presented at the Conference on Multivariate Time Series, University of Washington, Seattle. June 28 – July 10, 1991.
- <u>Invited speaker</u>, "A Nonparametric Framework for Data Analysis," presented at the conference: *Statistical Asymptotic Theory and Its Applications*. Kagoshima University, Japan, December 5 – 7, 1991.

- <u>Invited speaker</u>, "Nonparametric Time Series Regression," presented at *The 3rd Pacific Area Statistical Conference*. Tokyo, Japan, December 11 13, 1991.
- 21. <u>Invited speaker</u>, "Nonparametric Function Estimation Involving Censored Data," presented at the *Institute of Statistical Mathematics*. Tokyo, Japan, December 17, 1991.
- 22. <u>Invited speaker</u>, "Robust Nonparametric Time Series Regression," presented at the conference: *Topics in Statistical Inference*. Hiroshima University, Japan, December 19 – 22, 1991.
- 23. <u>Invited speaker</u>, "A Nonparametric/Semi-parametric Framework for Data Analysis," presented at the Department of Mathematics, Kyushu University, Japan, December 24, 1991.
- 24. <u>Invited speaker</u>, "Robust nonparametric function estimation," Mathematical Sciences Research Institute, Berkeley, California. May 20, 1992.
- 25. Invited speaker, Humboldt University, 1993. Berlin, Germany.
- 26. Invited speaker, Conference on Nonparametric Estimation, 1993. Taipei, Taiwan.
- 27. Invited speaker, Hazard Regression. IMS Annual Meeting in San Francisco, August, 1993.
- Invited speaker, Conditional Logspline Models. IMS Annual Meeting in San Francisco, August, 1993.
- 29. <u>Invited speaker</u>, *Hazard Regression*. Australian National University, 1994. Canberra, Australia.
- 30. <u>Invited speaker</u>, *Hazard Regression*. 1994. Australian Graduate School of Management, University of New South Wales, Sydney, Australia.
- 31. <u>Invited speaker</u>, Conference to Commemorate Late Professor Tosio Kitagawa. Kyushu University, Japan, 1994.
- 32. <u>Invited speaker</u>, *Theory and applications of deconvoluted kernel estimators*. Presented at the 1995 ENAR Meeting in Birmingham, Alabama.
- 33. Invited speaker, Hazard regression. Duke University, 1995.
- 34. Invited speaker, Hazard regression. Department of Statistics, University of Pittsburgh, 1995.
- Invited speaker, Hazard regression. Department of Mathematics, University of California, San Diego, 1995.
- 36. Invited speaker, Hazard regression. Merck and Co. 1996.
- Invited speaker, Interdisciplinary Workshop On Time Series Analysis. Texas A&M University, College Station, Texas, 1996.
- 38. Invited speaker, Hazard regression. University of Texas at El Paso, Texas, 1997.

- <u>Invited speaker</u>, Estimating density function from length-biased data. Symposium on Nonparametric Functional Estimation, October 13–24, 1997. Université de Montréal, Canada.
- 40. <u>Invited speaker</u>, *Asymptotics for hazard regression*. The 3rd International Triennial Calcutta Symposium. December 26–28, 1997. Calcutta, India.
- Invited speaker, Extended linear modeling involving length-biased data. Recent Advances in Statistics and Probability. ISI/Bernoulli Conference. December 29, 1997 – January 1, 1998. India.
- 42. <u>Invited speaker</u>, *Extended linear modeling involving length-biased data*. INTERNATIONAL CONFERENCE ON PROBABILITY AND STATISTICS AND THEIR APPLICATIONS, Hanoi, Vietnam, June 9-11, 1999.
- Invited speaker, ON ESTIMATING POSSIBLY DISCONTINUOUS REGRESSION INVOLV-ING STATIONARY. Nonlinear Time Series Modeling, September 9–11, 1999, Kyushu University, Japan.
- Invited speaker, Asymptotics for wavelet based estimates of piecewise smooth regression for stationary time series. The International Symphone Frontiers of Time Series Modeling, February 7–10, 2000, Institute of Statistical Mathematics, Tokyo, Japan.
- 45. <u>Invited speaker</u>, *Hazard Regression*. Math. Forschungsinstitut Oberwolfach, September 6–10, 2000, Germany.
- 46. <u>Invited speaker</u>, *Water quality study: A functional data analytic approach*. December 14–17, 2000, Nara, Japan.
- 47. <u>Invited speaker</u>, Survival time regression in the presence of measurement errors. December, 2000, New Delhi, India.
- Invited speaker, Invited speaker The 2002 Taipei International Statistical Symposium and Bernoulli Society EAPR Conference, 7, 10 July, 2002, Taipei.
- 49. Invited speaker, SARS Workshop at NUS, June 2003.
- <u>Invited speaker</u>, Statistical Modeling with Splines. The Fifth Hakata Symposium: Theories and Applications of Statistical Methods for Non-linearity and Biostatistics. December 17-19, 2003, Hisayama Health C&C Center, Fukuoka, Japan.
- 51. Invited speaker Metabolomics. Hiroshima University, Japan. February, 2004.
- 52. Invited speaker Biostatistics in the 21st Century. Kyushu University, Japan. May, 2004.
- 53. Invited speaker Building Gene Networks from Biological Information. SAMSI, July 2004.
- 54. <u>Invited speaker</u> Three Learning Examples from Life Sciences. Oberwolfach, Germany. Nov 14-20, 2004.

- 55. <u>Invited speaker</u> Three Learning Examples from Life Sciences. Department of Biostatistics, University of North Carolina at Chapel Hill, January 19, 2005.
- 56. Invited speaker Statistical Modeling with Splines. Duke University, February 11, 2005.
- 57. <u>Invited speaker</u> Statistical Modeling with Splines. Department of Statistics, University of North Carolina at Chapel Hill, April 11, 2005.
- 58. <u>Invited speaker</u> *Hemodynamic Response Functions*, The Third Lehmann Symposium, Rice University, May 2007.
- 59. <u>Invited speaker</u> Maximum Likelihood Independent Component Analysis, ICSA 2007 APPLIED STATISTICS SYMPOSIUM, Raleigh, NC.
- <u>Invited speaker</u> Spatio-Temporal fMRI Modeling, International Conference on the Frontiers of Statistics (ICFS) 2007, Kunming.
- 61. <u>Invited speaker</u> Spatio-Temporal fMRI Modeling, Biostatistics Center, Kurume Medical University, Kurume, October 19–25 2007.
- 62. <u>Invited speaker</u> Spatio-Temporal fMRI Modeling, Graduate School of Mathematics, Kyushu University, October 23, 2007
- 63. <u>Invited speaker</u> On Hemodynamic Response Function, Department of Statistics and Applied Probability, 10th Anniversary Symposium. National University of Singapore, Feb 24–25, 2008.
- 64. <u>Invited speaker</u> Supervised ICA, The 2nd International Kurume Symposium on Biostatistics, Kurume Medical University, Japan, Feb 25–27, 2008.
- <u>Invited speaker</u> Supervised ICA, Symposium on High Dimensional Data Analysis, Institute of Mathematical Statistics, National University of Singapore, Feb 28–29, 2008.
- <u>Invited speaker</u> Survival Analysis involving Measurement Errors, The 3rd International Kurume Symposium on Biostatistics, Kyushu University School of Medicine, Japan, Jan 29–31, 2009.
- 67. <u>Invited speaker</u> Spatio-Temporal Data Analysis involving fMRI, The Kurume Symposium on Biostatistics, Kyushu University School of Medicine, Japan, March, 2010.
- 68. <u>Invited speaker</u> Feature Extraction involving fMRI and Neuro Spike Train Data, Department of Statistics, University of Wisconsion, November, 2010.
- <u>Invited speaker</u> [ICA and Its Applications]. Department of Mathematics and Number Theory, Ulm University, Ulm, Germany, Dec 14, 2012.
- <u>Invited speaker</u> [Group Blind Source Separation (GBSS)]. Department of Mathematics and Number Theory, Ulm University, Ulm, Germany, July 8, 2014.

- 71. <u>Invited speaker</u> Independent Colored Source Detection. Department of Statistics, North Carolina State University, April, 2015.
- 72. <u>Invited speaker</u> Spatio-Temporal Modeling for fMRI Data. ITISE 2015 (International workconference on Time Series), Granada, Spain. July 1–3, 2015. http://itise.ugr.es/
- 73. <u>Keynote speaker</u> The 5th International Biometric Society-East Asia Regional Biometric Conference (EAR-BC), Kyushu University, Fukuoka, Japan. Dec 20–22, 2015. Keynote Speaker
- 74. Invited speaker Statistics, NCSU, May 2015.
- 75. Invited speaker Biostatistics Center, Kurume, Japan, March 2015.

#### Contributed papers presented

- "Asymptotic Properties of Kernel Estimators based on Local Medians," presented at the 204th Meeting of the Institute of Mathematical Statistics, Madison, Wisconsin, May 1988.
- 2. "Nonparametric Function Estimation Involving Time Series," presented at the 206th Meeting of the Institute of Mathematical Statistics, Fort Collins, Colorado, August 1988.
- "Nonparametric Curve Estimation with Correlated Errors," presented at the 208th Meeting of the Institute of Mathematical Statistics, Davis, California, June 1989.
- "Semi-parametric Repeated Measurement Models," presented at the 210th Meeting of the Institute of Mathematical Statistics, Washington, D.C., August 1989.
- "Semi-parametric Time Series Regression," presented at the Second World Congress of the Bernoulli Society and the 53rd meeting of the Institute of Mathematical Statistics, Uppsala, Sweden, August 1990.
- "Nonparametric function estimation involving errors-in-variables," presented at the Joint ASA-IMS Meeting. Atlanta, Georgia, August 19, 1991.
- "Wavelet-based curve estimation for dependent data," presented at the Third World Congress of The Bernoulli Society and The IMS Annual Meeting in Chapel Hill NC, June, 1994.
- "Should We Use Intensity or Ratio in Differential Expression Analysis of Two-channel Microarray?" *International Conference on Analysis of Genomic Data*. May 10-11, 2004, Boston, MA. Presented by Shibing Deng.
- "Comparison of Gene Selection Methods in Tumor Subclass Prediction Using Microarray Gene Expression Data," ENAR Spring Meeting March, 2004, Pittsburg, PA. Presented by Shibing Deng.

## Collaborated papers presented

- Ford, S., Calhound, A. Nie, Y., Truong, Y. "Neck Pain or Headache: Which is the Better Predictor of 2-Hour Pain-Free Following Migraine Treatment?" 2008.
- Lewis, M.M., Sen, S., Kawaguchi, A., Truong, Y., Chen, W., Lee, S., McKeown, M.J., and Huang, X. The effect of levodopa on motor pathways in healthy subjects: a functional MRI (fMRI) study. 13th International Congress of the Movement Disorders Society Meeting, June 7-11, 2009.
- Sen, S., Truong, Y., Lewis, M.M., and Huang, X. Task-specific recruitment of cerebellothalamo-cortical motor circuitry during progression of Parkinson's disease. 13th International Congress of the Movement Disorders Society Meeting, June 7-11, 2009.
- 4. Lewis, MM, Du, G, Sen, S, Kawaguchi, A, Truong, Y, McKeown, MJ, and Huang, X. Differential effects of levodopa on motor neurocircuits in tremor- and akinetic/rigidity-predominant Parkinson's disease. To be presented at the 134th Annual American Neurological Association meeting, Baltimore, MD, October 13, 2009.

# **Professional services**

- 1. Associate Editor for The Annals of Statistical Mathematics, 2004–2012.
- 2. Associate Editor for Journal of Bioinformatics, 2005–2007.
- 3. Member of Nomination Committee, Institute of Mathematical Statistics, USA.
- 4. Referee for professional journal: The Annals of Statistics, Journal of American Statistical Association, Biometrika, Biometrics, Probability Theory and Related Fields, Journal of Multivariate Analysis, The American Statistician, Journal of Clinical Trials, Journal of Nonparametric Statistics, Statistics, Statistics in Medicine, Communications in Statistics B, National Science Foundation Grant Applications, National Institutes of Health Grant Applications, Natural Sciences and Engineering Research Council of Canada.
- 5. Vice President of NC ASA Local Chapter (1993–1994)
- 6. President of NC ASA Local Chapter (1994–1995)
- 7. Chairing Session in ASA meetings (1995, 1997)

# **Doctoral Dissertation Directed**

- Masse, B. (PhD): "Conditional logspline models," Department of Biostatistics, 1991–1993. Current Position:
- Hamilton, S. (PhD): "Partially linear models for the analysis of multiple visit clinical trials." Department of Biostatistics, 1991–1994.

- O'Grady, H. K. (PhD): "Nonparametric estimation involving censored data," Department of Biostatistics, 1991–1994.
- Deng, Shibing (PhD): "Some Aspects of Mixed Models for Gene Expression Data Analysis." Department of Biostatistics, 2000–2004. Co-supervised with Russ Wolfinger at SAS. Current Position: Pfizer
- Liang, Shen (PhD): "Extended Linear Models for Length Biased Data." Department of Statistics and Applied Probability, National University of Singapore. 2000–2005. Current Position: Biostatistics at NUS.
- Bai, Ping (PhD): "Temporal-Spatial Modeling for fMRI Data." Department of Statistics and Operations Research, 2003–2007. Current Position: Apple.
- Wenjie Chen (PhD): "On estimating hemodynamic response functions," Department of Statistics and Operations Research, 2007–2011. Current Position: AIG.
- Seonjoo Lee (PhD): "Independent Component Analysis involving correlated signals," Department of Statistics and Operations Research, 2007–2011. Current Position: Associate Professor of Biostatistics at Columbia University.
- Ruiwen Zhang (PhD): "Neural Spike Train Modeling," Department of Statistics and Operations Research, 2007–2011. Current Position: SAS, Inc.
- Dong Wang (PhD): "Group ICA," Department of Statistics and Operations Research, 2011– 2015.
- Rachel Nethery (PhD): "On Statistical Inference for ICA," Department of Biostatistics, 2014– 2017.
- 12. Kevin Donoven (PhD), 2017–2021. GRA supported by Piven's School Age Grant.
- 13. Josh Rutsohn (DrPH), 2018–2023. GRA supported by Piven's School Age Grant.

# Master Theses Supervised

- Lam, Lai Choi (MS): "A Small Sample Study of ACE Regression Analysis," Department of Biostatistics, 1987.
- Bresler, Lynn (MPH): "Bivariate Density Estimation Based on Cross Sectional Pulmonary Function Data," Department of Biostatistics, 1989.
- 3. Smith, Melissa (MS): "Principal Component Analysis on Physical Activity Data—Comparison of American and Dutch Populations," Department of Biostatistics, 1990.
- 4. Shih, Chuan-Feng (MS): "An Empirical Likelihood Approach for Testing the Equality of Two Variances," Department of Biostatistics, 1991.

- Moelen, Habib (MS): "Nonparametric estimation of transition probabilities in multivariate responses," Department of Biostatistics, 1993.
- S. Arivalzahan (Arivu). Thesis title is "Logistic Regression involving free knot Linear splines". 2000–2001.
- 7. Rhee, Seungshin. "Functional MRI data analysis using two different approaches: Data-driven (by Group ICA) and Hypothesis-driven (by SPM)," 2007.
- 8. Bu, Sunyoung. "On the Null Distribution for Detecting fMRI Activity," 2008
- Nie, Yonghong. "Neck Pain or Headache, Which Is the Better Determinant of Migraine Treatment Effect?" 2009
- 10. Hana, Lee. "Calibrating the Null Distribution for Detecting fMRI Activity," 2010.
- 11. Zhang, Ji. "Testing Linearity and Gaussianity of fMRI Data by using Higher Order Spectral Analysis," 2014.
- 12. Halevy, Avner. "Supervised SVD of fMRI Data with a Time Varying Frequency," 2015.
- 13. Cody, Jenna Abigail "Modulatory Clinical Measures in the Neural Interaction between Executive Function and Affective Processing: An EEG Study," 2018.
- 14. Wu, Austin Cheng-Shen, (MPH). "Interaction of Acute Stress and Neural Region Response in Adolescents with Anxiety," 2024.

#### **Undergraduate Honors Papers Supervised**

- 1. Victoria Ding (2008). "A comparative study of PD vs normal subjects using motor based fMRI data."
- 2. Sendhilnathan Ramalingam (2010). "Density Estimation for Intensity-Biased Data."
- 3. Xue, Angela (2018–2019).
- 4. Li, Yirun (2018–2019).

#### **Doctoral Dissertation Committees**

- 1. Kritchevsky, Steve (PhD): "Lipid Changes Preceding the Diagnosis of Cancer," Department of Epidemiology, August 1989.
- Chu, Chih-Kang (PhD): "Some Results on Nonparametric Regression," Department of Statistics, August 1989.
- Hazard, Carol (PhD): "Identification of Heat Waves and the Relationship of Hospitalizations," Department of Geography, May 1990.

- Shermanski, Lynn (PhD): "K-Ratio Tests with Covariates," Department of Biostatistics, May 1990.
- Edwards, Lloyd (PhD): "Errors-in-variables and Statistical Inference," Department of Biostatistics, August 1990.
- Patil, Prakash (PhD): "Automatic Smoothing Parameter Selection in Hazard Rate Estimation," Department of Statistics, August 1990.
- Thorn, Mike (PhD): "Automation of the Classification of Endpoints in Cardiovascular Research," Department of Biostatistics. August 1992.
- Adler, Amanda (PhD): "The Epidemiology of Uterine Sarcoma," Department of Epidemiology. May 1992.
- 9. Mori-Brooks, Maria (PhD): "Bandwidth selection for kernel estimators of the intensity function of a nonhomogeneous Poisson process," Department of Statistics, 1991.
- 10. Flewelling, Robert (PhD): "Socio-structural associations with state-specific cigarette consumption trends: 1950–1988," Department of Health Behavior and Health Education, 1991.
- 11. Cheng, Ming-Yen (PhD): "Curve Estimation at Boundary Regions," Department of Statistics, completed in 1994.
- 12. Huang, Li-Shan (PhD): "Nonparametric Curve Estimation," Department of Statistics, completed in 1995.
- Mihlan, G. (PhD): "Evaluation of Alternative Methods of Exposure Assessment Derived from Spectral Analysis of Extremely Low Frequency Electromagnetic Fields," Department of Environmental Sciences and Engineering, to be completed in 1997.
- 14. Sigurdur Runar Saemundsson (PhD): "Caries Prediction, Beyond Regression," (neuronet based classification) Department of Epidemiology, completed in 1996.
- 15. Borja, Judith (PhD): "Young Maternal Age At First Pregnancy And Infant Growth," Department of Nutrition, 1995–1998
- Vajanapoom, Nitaya (PhD): "Paticulate Air Pollution Exposure and Daily Mortality in Bangkok. Department of Epidemiology, 1997–1999.
- 17. Du Wenbo (PhD), Department of Community, Occupational and Family Medicine. Completed in 2002, Faculty of Medicine, National University of Singapore.
- Daniels, Melissa C. (PhD), "Dietary Diversity As A Measure Of Diet Quality Throughout Childhood," Department of Nutrition, 2004 – 2006.
- Chung, Yeonseung (PhD), "Nonparametric Bayesian Inferences on Predictor-Dependent Response Distributions," Biostatistics, 2008.

- Lee, Mihee (PhD), "Deconvolution Estimation of a Mixture Distribution with Boundary Effects Motivated by Mutation Distribution," Statistics and OR, 2009.
- 21. Spencer Hays (PhD), Statistics and OR, 2010–2011.
- 22. Sayan Dasgupta (PhD), Biostatistics, 2013–2014.
- 23. Jennifer L. Moss (PhD), Department of Health Behavior, SPH, 2013–2015.
- 24. Bradley C. Saul (2018). "Applications of and Tools for Causal Inference," Department of Biostatistics, UNC-CH.

### Master Thesis Committee

 McMahon, Robert (MS): "Quality Control Using Duplicate Samples," Department of Biostatistics, 1987.

#### Mentoring Postdocs

- 1. Mark Shen (2015–2016 CIDD). Currently, a faculty in School of Medicine.
- Meghan Swanson (PhD), 2015–2018 at CIDD. Will be a new faculty at University of Texas, Dallas in 2019.
- 3. Candace Leigh, PhD, Belger's Lab 2016-.
- 4. Henry Teague (PhD, Pychology, 2017), co-supervised with A. Belger.
- 5. Erin Walsh (PhD), 2017– CIDD. A new K-Award receiver in 2018.
- 6. Jessica Girault, (PhD), 2018– at CIDD.
- 7. Grzadzinski, Rebecca (PhD), 2018- at CIDD
- 8. Guerra, C. L. (2018 –) co-supervised with A. Belger.

## **Courses Taught**

- 1. BIOS 101: Fundamental of Biostatistics.
- 2. BIOS 106: Mathematical Methods in Biostatistics.
- 3. BIOS 145, 545: Principles of Experimental Analysis.
- 4. BIOS 163, 636: Intermediate Linear Models.
- 5. BIOS 167: Introduction to Stochastic Processes.
- 6. BIOS 259: Time Series Analysis.
- 7. BIOS 267: Linear Models II. (Special topics in Multivariate Analysis.)

- 8. BIOS 550: Basic Elements of Probability and Statistical Inference I.
- 9. BIOS 650: Basic Elements of Probability and Statistical Inference I.
- 10. BIOS 740: Biomedical Signal Analysis
- 11. BIOS 841: Principles of Statistical Consulting