

# Damla Şentürk

*Curriculum Vitae*

November 2014

## CONTACT INFORMATION

Department of Biostatistics  
School of Public Health  
University of California, Los Angeles  
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## EDUCATION

PhD (2004), Statistics, University of California, Davis  
MS (2001), Statistics, University of California, Davis  
BS (1999), Mathematics, Boğaziçi University, Istanbul, Turkey

## EMPLOYMENT

### Current

Associate Professor	Department of Biostatistics, UCLA, 2013-present
Senior Consulting Faculty Member	Biostatistics Core (SISat), UCLA Semel Institute of Neuroscience and Human Behavior, 2011-present

### Previous

Assistant Professor	Department of Biostatistics, UCLA, 2011-2013
Assistant Professor	Department of Statistics, Penn State University, 2004-2011
Graduate Research Assistant	Department of Statistics, UC Davis, 2001-2004
Associate Instructor	Department of Statistics, UC Davis, Summer 2001, 2003
Graduate Teaching Assistant	Department of Statistics, UC Davis, 1999-2004

## PROFESSIONAL AFFILIATION

Elected Member, International Statistical Institute (2006-present)  
Member, American Statistical Association (2002-present)  
Member, Institute of Mathematical Statistics (2002-present)

## RESEARCH PUBLICATION

### Articles published or in press

1. Şentürk, D. and Müller, H. G. (2005) Covariate adjusted regression. *Biometrika*, 92: 75-89.
2. Şentürk, D. and Müller, H. G. (2005) Covariate adjusted correlation analysis via varying coefficient models. *Scandinavian Journal of Statistics*, 32: 365-383.
3. Carey, J. R., Liedo, P., Müller, H. G., Wang, J. L., Şentürk, D., and Harshman, L. (2005) Biodemography of a long-lived tephritid: reproduction and longevity in a large cohort of female Mexican fruit flies, *anastrepha ludens*. *Experimental Gerontology*, 40: 793-800.
4. Şentürk, D. and Müller, H. G. (2006) Inference for covariate adjusted regression via varying coefficient models. *Annals of Statistics*, 34: 654-679.

5. **Şentürk, D.** (2006) Covariate adjusted varying coefficient models. *Biostatistics*, 7: 235-251.
6. **Şentürk, D.** and Nguyen, D.V. (2006) Estimation in covariate-adjusted regression. *Computational Statistics and Data Analysis*, 50: 3294-3310.
7. Nguyen, D. V. and **Şentürk, D.** (2007) Distortion diagnostics for covariate-adjusted regressions: Graphical techniques based on local linear modeling. *Journal of Data Science*, 5: 471-490.
8. Chen, J., **Şentürk, D.**, Wang, J. L., Müller, H. G., H. G., Carey, J. R., Caswell, H. and Caswell-Chen, E. P. (2007) A demographic analysis of the fitness cost of extended longevity in *Caenorhabditis elegans*. *Journal of Gerontology: Biological Sciences*, 62A: 126-135.
9. Nguyen, D. V., Liu, H. and **Şentürk, D.** (2007) A general FDR-based computational framework for sample size planning in microarray studies. In *Advanced Computational Methods for Biocomputing and Bioimaging*. Pham, T., Yan, H., and Crane, D. (eds), Nova Science Publishers, New York, 55-69.
10. Nguyen, D. V., **Şentürk, D.**, Harvey, D. J. and Li, C. S. (2008) Sample size and power in genomics studies. In *Computational Biology: New Research*. Russe, A. S. (ed), Nova Science Publishers, New York, 59-87.
11. Nguyen, D. V. and **Şentürk, D.** (2008) Multicovariate adjusted regression models. *Journal of Statistical Computation and Simulation*, 78: 813-827.
12. Nguyen, D. V., **Şentürk, D.**, and Carroll, R. J. (2008) Covariate adjusted linear mixed effects model with an application to longitudinal data. *Journal of Nonparametric Statistics*, 20: 459-481.
13. **Şentürk, D.** and Müller, H. G. (2008) Generalized varying coefficient models for longitudinal data. *Biometrika*, 95: 653-666.
14. **Şentürk, D.** and Nguyen, D. V. (2009) Asymptotic properties of covariate-adjusted regression with correlated errors. *Statistics and Probability Letters*, 79: 1175-1180.
15. **Şentürk, D.** and Nguyen, D. V. (2009) Partial covariate adjusted regression. *Journal of Statistical Planning and Inference*, 139: 454-468.
16. **Şentürk, D.** and Müller, H. G. (2009) Covariate-adjusted generalized linear models. *Biometrika*, 96: 357-370.
17. **Şentürk, D.**, Nguyen, D. V., Tassone, F., Hagerman, R. J., Carroll, R. J., Hagerman, P. J. (2009) Covariate adjusted correlation analysis with application to *FMR1* premutation female carrier data. *Biometrics*, 65: 781-792.
18. Nguyen, D. V. and **Şentürk, D.** (2009) Covariate-adjusted regression for longitudinal data incorporating correlation between repeated measurements. *Australian and New Zealand Journal of Statistics*, 51: 319-333.
19. Nguyen, D. V. and **Şentürk, D.** (2009) A consistent local linear estimator of the covariate adjusted correlation coefficient. *Statistics and Probability Letters*, 79: 1684-1689.
20. Papadopoulos, N. T., Carey, J. R., Liedo, P., Müller, H. G. and **Şentürk, D.** (2009) Virgin females compete for mates in the male lekking species, *Ceratitis capitata*. *Physiological*

*Entomology*, 34: 238-245.

21. Hessel, D., Nguyen, D. V., Green, C., Chavez, A., Tassone, F., Hagerman, R. J., **Şentürk, D.**, Reiss, A. L., Hall, S. (2009) A solution to limitations of intelligence testing in children with developmental disabilities: The case of fragile X syndrome. *Journal of Neurodevelopmental Disorders*, 1: 33-45.
22. **Şentürk, D.** and Müller, H. G. (2010) Functional varying coefficient models for longitudinal data. *Journal of the American Statistical Association*, 105: 1256-1264.
23. **Şentürk, D.** (2010) Comments on: Dynamic Relations for Sparsely Sampled Gaussian Processes. *Test*, 19: 54-55.
24. Kim, K.\* , **Şentürk, D.** and Li R. (2011) Recent history functional linear models. In DR Hunter, DPS Richards and JL Rosenberger (eds.) *Nonparametric Statistics and Mixture Models: A Festschrift in honor of Thomas P. Hettmansperger* (World Scientific, Singapore). (\*My Ph.D. student)
25. Kim, K.\* , **Şentürk, D.** and Li R. (2011) Recent history functional linear models for sparse longitudinal data. *Journal of Statistical Planning and Inference*, 141: 1554-1566. (\*My Ph.D. student)
26. **Şentürk, D.** and Nguyen, D. V. (2011) Varying coefficient models for sparse noise-contaminated longitudinal data. *Statistica Sinica*, 21: 1831-1856.
27. Mohammed, S. M.\* , **Şentürk, D.**, Dalrymple, L. S. and Nguyen, D. V. (2012) Measurement error case series models with application to infection-cardiovascular risk in older patients on dialysis. *Journal of the American Statistical Association*, 107, 1310-1323. (\*Ph.D. thesis committee advisee)
28. Mohammed, S. M.\* , Dalrymple, L. S., **Şentürk, D.** and Nguyen, D. V. (2013) Design considerations for case series models with exposure onset measurement error. *Statistics in Medicine*, 32: 772-786. (\*Ph.D. thesis committee advisee)
29. Jalbrzikowski, M., Carter, C., **Şentürk, D.**, Chow, C., Hopkins, J. L., Green, M. F., Galvan, A., Cannon, T. D. and Bearden, C. E. (2013) Social cognition in 22q11.2 microdeletion syndrome: Relevance to psychosis? *Schizophrenia Research*, 142: 99-107.
30. **Şentürk, D.**, Dalrymple, L. S., Mohammed, S. M., Kaysen, G. A. and Nguyen, D. V. (2013) Modeling time varying effects with generalized and unsynchronized longitudinal data. *Statistics in Medicine*, 32: 2971-2987.
31. Mohammed S. M., Dalrymple, L. S., **Şentürk, D.** and Nguyen, D. V. (2013) Naive hypothesis testing for case series models with time-varying exposure onset measurement error: Inference for infection-cardiovascular risk in patients on dialysis. *Biometrics*, 69: 520-529. (\*Ph.D. thesis committee advisee)
32. Kurum, E.\* , Li, R., Wang, Y. and **Şentürk, D.** (2013) Nonlinear varying coefficient models and its applications. *Journal of Agricultural, Biological and Environmental Statistics*, 19(1): 57-81. (\*My M.S. student)

33. Golembo, S. S., Bachman, P., **Şentürk, D.**, Cannon, T., Bearden, C. E. (2013) Youth-caregiver agreement on clinical high-risk symptoms of psychosis. *Journal of Abnormal Child Psychology*, 42(4): 649-658.
34. Jalbrzikowski, M., Jonas, R., **Şentürk, D.**, Patel, A., Chow, C., Green, M. F., Bearden, C. E. (2013) Structural abnormalities in cortical volume, thickness, and surface area in 22q11.2 microdeletion syndrome: relationship with psychotic symptoms. *NeuroImage: Clinical*, 3: 405-415.
35. **Şentürk, D.**, Ghosh, S. and Nguyen, D. V. (2014) Exploratory time varying lagged regression: Modeling association of cognitive and functional trajectories with expected clinic visits in older adults. *Computational Statistics and Data Analysis*, 73: 1-15.
36. Davis, M. C., Green, M. F., Lee, J., Horan, W. P., **Şentürk, D.**, Clarke, A. D. and Marder, S. R. (2014) Oxytocin-Augmented Social Cognitive Skills Training in Schizophrenia. *Neuropsychopharmacology*, in press.
37. Estes, J.\*, Nguyen, D. V., Dalrymple, L. S., Mu, Y. and **Şentürk, D.** (2014) Cardiovascular event risk dynamics over time in older patients on dialysis: A generalized multiple-index varying coefficient model approach. *Biometrics*, in press.  
(\*My Ph.D.student)
38. Jeste, S. S., Kirkham, N., **Şentürk, D.**, Hasenstab, K., Sugar, C., Kupelian, C., Baker, E., Sanders, A., Shimizu, C., Norona, A., McEvoy, K., Paparella, T., Freeman, S. F. N. and Johnson, S. P. (2014) Neural correlates of visual statistical learning in young children with autism spectrum disorder (ASD). *Developmental Science*, in press.
39. Kasari, C., Lawton, K., Shih, W., Landa, R., Carson, T., Lord, C., Orlich, F., King, B., Wetherby, A. and **Şentürk, D.** (2014) Caregiver-mediated intervention for low-resourced preschoolers with autism: An RCT. *Pediatrics*, in press.
40. Jeste, S. S., Wu, J. Y., **Şentürk, D.**, Varcin, K., Ko, J., McCarthy, B., Shimizu, C., Diees, K., Farley, V. V., Shain, M. and Nelson, C. A. (2014) Early cognitive and developmental trajectories are associated with ASD in infants with Tuberous Sclerosis Complex. *Neurology*, in press.
41. **Şentürk, D.**, Dalrymple, L. S., Mu, Y. and Nguyen, D. V. (2014) Weighted hurdle regression method for joint modeling of cardiovascular events likelihood and rate in the U.S. dialysis population. *Statistics in Medicine*.
42. **Şentürk, D.**, Dalrymple, L. S. and Nguyen, D. V. (2014) Functional linear models for zero-inflated count data with application to modeling hospitalizations in patients on dialysis. *Statistics in Medicine*.
43. Kasari, C., Shih, W. and **Şentürk, D.** (2014) Response letter for: Caregiver-mediated intervention for low-resourced preschoolers with autism: An RCT. *Pediatrics*, published online.
44. Jalbrzikowski, M., Villalon, J., Karlsgodt, K. K., **Şentürk, D.**, Chow, C., Thompson, P., Bearden, C. E. (2014) Altered white matter microstructure is associated with social cognition and psychotic symptoms in 22q11.2 microdeletion syndrome. *Frontiers in Behavioral Neuroscience*.

## **Articles submitted for publication**

45. Altieri, S. C., Yang, H., O'Brien, H. J., Redwine, H. M., **Şentürk, D.**, Hensler, J., Andrews, A. M. (2014) Perinatal vs. genetic programming of serotonin states associated with anxiety. *Biological Psychiatry*.
46. Gilman, T. L., Ramos, D. J., Desai, D., Amin, S., Ye, M., Jung, M., **Şentürk, D.**, Vrana, K. E. and Andrews, A. M. (2014) Comparison of two tryptophan hydroxylase inhibitors in adult and postnatal mice. *International Journal of Neuropsychopharmacology*.
47. Hasenstab, K.\*, Sugar, C., Telesca, D., McEvoy, K., Jeste, S. and **Şentürk, D.** (2014) Identifying longitudinal trends within EEG experiments. *Biometrics*.  
(\*My Ph.D.student)
48. Campos, L. F., **Şentürk, D.**, Dalrymple, L. S. and Nguyen, D. V. (2014) Estimation under misspecification of the risk period in the self-controlled case series method with application to vaccine safety studies. *Biometrics*.
49. McEvoy, K., Hasenstab, K., **Şentürk, D.**, Jeste, S. (2014) Effects of physiological artifacts on EEG power measurements in children. *Brain Imaging and Behavior*.
50. Lavretsky, H., Reinlieb, M., Siddarth, P., **Şentürk, D.**, Ercoli, L. M., Cyr, N. S. (2014) Combined citalopram and methylphenidate lead to enhanced treatment response than either treatment alone in geriatric depression: a randomized double-blind, placebo-controlled trial. *American Journal of Psychiatry*.
51. Sautter, F., Glynn, S., Cretu, A. and **Şentürk, D.** (2014) Efficacy of structured approach therapy in reducing PTSD in returning veterans: A randomized clinical trial.
52. Estes, J. P., Nguyen, D.V., Dalrymple, L. S., Mu, Y. and **Şentürk, D.** (2014) Time-varying effect modeling with longitudinal data truncated by death: Conditional models, interpretations and inference. *Journal of the American Statistical Association*.  
(\*My Ph.D.student)

## **TEACHING ACTIVITIES**

### **Short Course**

University of Kentucky, 'Time course data and varying coefficient modeling.' September 2011

### **Course development (and major revision)**

*Biostat 202A: Application of Statistical Theories in Biomedical Research*  
(developed as new course at UCLA)

*Stat 513: Theory of Statistics I (major revision at Penn State)*

*Stat 514: Theory Statistics II (major revision at Penn State)*

**Courses Taught or Assigned (Instructor of record)**

<b>Course (units)</b>	<b>Year-Term</b>	<b>Enrollment*</b>	<b>Rating I** (max)</b>	<b>Rating C*** (max)</b>
Biostat 202B: Topics in Estimation (UCLA, 4 units)	2014-Winter	14 (G)		
Biostat 202A: <i>Application of Statistical Theories in Biomedical Research</i> (UCLA, 4 units)	2014-Fall 2013-Fall 2012-Fall 2011-Fall	15 (G) 19 (G) 13 (G) 19 (G)	8.63 (9)	8.37 (9)
Biostat 250A: <i>Linear Statistical Models</i> (UCLA, 4 units)	2012-Fall	7 (G)		
Biostat 596: <i>Directed Individual Study</i> (UCLA)	2012-Spring	2 (G)		
Stat 513: <i>Theory of Statistics I</i> (Penn State, 3 units)	2009-Fall 2008-Fall 2006-Fall	29 (G) 28 (G) 16 (G)	6.00 (7) 5.36 (7)	6.00 (7) 5.73 (7)
Stat 514: <i>Theory of Statistics II</i> (Penn State, 3 units)	2009-Spring 2007-Spring	21 (G) 13 (G)	6.85 (7) 5.50 (7)	6.77 (7) 6.00 (7)
Stat 462: <i>Applied Regression Analysis</i> (Penn State, 3 units)	2009-Spring 2008-Spring 2006-Fall 2005-Fall	45 (U) 47 (U) 40 (U) 35 (U)	5.70 (7) 5.16 (7) 5.94 (7) 6.13 (7)	5.59 (7) 5.31 (7) 5.77 (7) 5.83 (7)
Stat 414: <i>Introduction to Probability Theory</i> (Penn State, 3 units)	2007-Fall 2005-Fall 2004-Fall	45 (U) 42 (U) 76 (U)	5.94 (7) 5.63 (7) 5.71 (7)	5.29 (7) 5.54 (7) 5.48 (7)
Stat 415: <i>Introduction to Mathematical Statistics</i> (Penn State, 3 units)	2006-Spring 2005-Spring	59 (U) 64 (U)	5.92 (7) 5.71 (7)	5.46 (7) 5.55 (7)
Stat 016: Freshman Seminar (Penn State, 3 units)	2007-Fall	7 (U)		
Stat 103: <i>Statistics for Economics</i> (UC Davis, 4 units)	2001-Summer	63 (U)	4.3 (5)	
Stat 13: <i>Introduction to Statistics</i> (UC Davis, 4 units)	2000-Spring	50 (U)	4.5 (5)	

\*G=graduate, U=undergraduate

\*\* Instructor rating (maximum value)

\*\*\* Course rating (maximum value)

## **Students and Advisement**

### *Thesis Advisor:*

- Jason Estes, Ph.D., Department of Biostatistics, UCLA (current)  
Thesis topic: Time Varying Effects of Risk Factors for Cardiovascular Events in Older Patients on Dialysis
- Kyle Hasenstab, Ph.D., Department of Statistics, UCLA (current)  
Thesis topic: Modeling Longitudinal Trends in Event-Related Potentials  
Joint advisee with Dr. Catherine Sugar
- Kion Kim, Ph.D., Department of Statistics, PSU (2010)  
Thesis topic: Recent History Functional Linear Model
- Esra Kurum, M.S., Department of Statistics, PSU (2009)  
Thesis topic: Estimation in Covariate-adjusted Nonlinear Regression

### *Thesis Committee Member:*

- Sheng Wu, Ph.D., Department of Biostatistics, UCLA (current)  
Thesis topic: Methods for the Design and Analysis of Cluster Randomized Trials with Unequal Cluster Size
- Hung-Hsiu Vivian Shih, DrPh, Department of Biostatistics, UCLA (2013)  
Thesis topic: Variable Selection in Psychiatric Studies
- Sandra Mohammed, Ph.D., Department of Public Health, UC Davis (2012)  
Thesis topic: Measurement Error Case Series Models
- Bo Kai, Ph.D., Department of Statistics, PSU (2009)  
Thesis topic: New Efficient Estimation and Variable Selection Methods for Semiparametric Varying Coefficient Models
- JunJia Zhu, Ph.D., Department of Statistics, PSU (2008)  
Thesis topic: Monitoring Profile Data
- Wei Zhang, Ph.D., Department of Statistics, PSU (2008)  
Thesis topic: A General Class of Agreement Coefficients for Categorical and Continuous Responses
- Jingyun Yang, Ph.D., Department of Statistics, PSU (2007)  
Thesis topic: Measurement of Agreement of Categorical Data
- Yang Wang, Ph.D., Department of Statistics, PSU (2007)  
Thesis topic: Nonlinear Varying Coefficient Models and Model Selection for Time Series Models

### *Undergraduate Advisor:*

As the Chair and Associate Chair of the undergraduate program in the Department of Statistics at the Pennsylvania State University, I have advised 25 statistics majors, 55 statistics minors, 5 double majors.

*Academic Advisor:*

Bonny Chan, M.S., Department of Biostatistics, UCLA  
Juhnyn Park, M.S. Department of Biostatistics, UCLA  
YuKyung Chang, M.S., Department of Biostatistics, UCLA  
Yuanyuan Fan, M.S., Department of Biostatistics, UCLA  
Sophia Hur, M.P.H., Department of Biostatistics, UCLA  
Helene Rivard, M.P.H., Department of Biostatistics, UCLA  
Aaron Scheffler, M.S., Department of Biostatistics, UCLA  
Qian Li, M.S., Department of Biostatistics, UCLA  
Roger Shih, M.P.H., Department of Biostatistics, UCLA  
Jennifer Gildner, M.S., Department of Biostatistics, UCLA  
Binqi Ye, M.S., Department of Biostatistics, UCLA

**Educational Outreach Activities**

Judge, Data Fest, UCLA (2013)

Presenter, Graduate student seminar, Dept of Statistics, PSU (2009)

Presenter, Graduate student seminar, Dept of Statistics, PSU (2005)

Presenter, Undergraduate student club, Dept of Statistics, PSU (2007)

Participant, Annual Penn State McNair Summer Research Conference (2005)  
(Program provides an opportunity for the low-income, first-generation undergraduate students to present their summer research projects.)

**AWARDS AND GRANTS**

**Awards**

- 2011 Honorarium from University of Kentucky for delivering a short course on 'Time course data and varying coefficient modelling'.
- 2009 I have been elected to be a SAMSI New Researcher Fellow in the fall semester of 2010 in the research program Analysis of Object Data.
- 2009 Article selected by *Biometrics* Co-Editors for presentation in a special Biometrics session at the Fifth Biannual Conference of the Eastern Mediterranean Region of the International Biometrics Society
- 2007 Travel Award, Texas A&M University (June). Travel support to attend Keystone II: New directions in semiparametric statistics, Colorado, USA
- 2006 Travel Award, National Science Foundation (June). Travel support to attend the Institute of Mathematical Statistics Annual Meeting and the Brazilian Summer School in Probability, Rio de Janeiro, Brazil
- 2003 Summer Research Fellowship, Univ. of California, Davis (July-September). Support for dissertation research
- 2002 Engineering/Computer-related Applications and Methods Fellowship, Graduate Studies, UC Davis (July-September). Support for research in modeling high dimensional curve data



- 2002 Travel Award, UC Davis (June). Travel support to attend the International Conference on Current Advances and Trends in Nonparametric Statistics, Crete, Greece
- 2002 Travel Award, Texas A&M University (October). Travel support to attend the 40<sup>th</sup> Anniversary Conference: Frontiers of Statistical Research, Texas A&M University, College Station, Texas
- 2001 Sacramento Statistical Association (SSA) Student Fellowship Award, Department of Statistics, UC Davis (December). Award to outstanding graduate student research (Topic: regression modeling under multiplicative coupling effects)

## **Grants**

### **Completed**

Institute: Statistical and Applied Mathematical Sciences Institute (SAMSI)  
 Research Fellowship (Fall, 2010)  
 Amount: \$22,532 (direct)  
 Role: Principle investigator

Based on my work in longitudinal and functional data analysis, I have also been invited to be a New Researcher Fellow at the SAMSI program on analysis of object data where I spent the fall semester of 2010.

Institute: NSF-Association for Women in Mathematics  
 Travel Grant (2009)  
 Amount: \$2,000

I received this travel grant to attend the Fifth Biannual Conference of the Eastern Mediterranean Region of the International Biometrics Society.

### **Ongoing**

R01 DK092232 (Senturk) 07/01/11 - 06/31/15 3.36 cal. months  
 NIH/NIDDK \$555,205 (direct)

*Effective semiparametric models for ultra-sparse, unsynchronized, imprecise data*

The proposal involves developing the necessary estimation and inference framework to use the United States Renal data System database in modeling age- and time-varying dynamics of the association between cardiovascular events and various contributing risk factors including infection. Understanding this cardiovascular-infection risk dynamics in patients over time is important to the development of targeted intervention strategies in the US dialysis population.

P30 A1 028697 (Zack/Cumberland) 04/01/13 - 02/28/18 .5 cal. months  
 NIH/NIAID \$177,886 (Core H).

UCLA Center For AIDS Research (CFAR), Biostatistics Core.

The goal of this project is to provide statistical support for AIDS research across the UCLA campus, including design of experiments, analysis of AIDS data, and grant submission.

Role: Co-Investigator, Core H.

P01 (Gukovskaya) 10/01/14-09/30/19 1.2 cal. months  
NIH-NIDDK \$8,249,520  
*Organelle Disorders in Pancreatitis*  
The project constitutes a highly integrated, collaborative research program designed to make a significant impact on investigation of the pathogenic mechanism of pancreatitis.

### **Pending**

R01 (Senturk) 04/01/15-03/31/19 4.2 cal. Months  
NIH –NIDDK \$1,508,997  
*Modeling Time Dynamic Multilevel Outcomes in Patients on Dialysis*  
The main goal of the project is to develop a general framework to estimation and inference for multilevel time-dynamic modeling of patient outcomes that accommodates multilevel data structures (e.g., patients nested within dialysis facilities or care providers and observations over time nested within patients).

R01 (Senturk, Sugar, Telesca)  
NIH \$2,292,987 07/01/15-06/30/20 3.6 cal. Months  
*A Unified Longitudinal Functional Data Framework for the Analysis of Complex Biomedical Data*  
The major goal of the project is to develop a comprehensive holistic theory and methodology for the analysis of longitudinal functional data. The proposal spans the subjects of regression, clustering and classification as well as event history data analysis.

R01-AT008383-01 (Lavretsky, H) 02/01/15-01/30/20 1.2 cal. months  
NIH/NIMH \$400,000  
*Neural mechanisms of Tai Chi Chih*  
The major goal of the project is to investigate neural mechanisms of Tai Chi Chih (TCC) compared to stretching exercise (STRETCH) and health and wellness education (HEW) program in geriatric depression.  
Role: Co-Investigator

R01 (Lavretsky, H) 07/01/15-06/30/20 1.2 cal. months  
NIH/NIMH \$400,000  
*Neural Plasticity Relating to Memory Training and Kundalini yoga*  
The major goals of this randomized clinical trial are to elucidate neural plasticity relating to memory training and/or Kundalini yoga to prevent/delay memory and cognitive loss in older adults with age-associated cognitive impairment.  
Role: Co-Investigator

U01 (Lavretsky, H) 07/01/15-06/30/20 1.2 cal. months  
NIH/NIMH \$400,000  
*Functional and Structural Brain Connectivity in Individuals with Neurodegenerative Diseases*  
The overarching aims of this project is focused on investigating functional and structural brain connectivity in individuals with neurodegenerative diseases (probable and possible Alzheimer's disease (AD) (early and late onset), and age related cognitive disorders such as Mild Cognitive impairment (MCI) (early, mid and late MCI), and age-appropriate cognitively normal controls with and without increased risk for AD.  
Role: Co-Investigator

R01 (Jeste, S.)  
NICHD \$500,000

07/01/2015-06/30/20 1.2 cal. months

*Behavioral intervention for infants with Tuberous Sclerosis Complex*

The main goal of the project is to investigate whether a well-validated behavioral intervention (JASPER: Joint attention symbolic play engagement regulation) can improve social communication skills, face processing, and resting state brain activity in infants with TSC.

## **PRESENTATIONS**

### **Invited Presentations**

- 2015 Joint Statistical Meetings, Seattle, Washington (August, to be given)
- 2015 Eastern North American/International Biometric Society Meeting, Miami, Florida (April, to be given)
- 2015 Department of Statistics, University of California, Santa Barbara (November, to be given)
- 2014 International Indian Statistical Association Conference, Riverside, CA (July)
- 2014 Western North American/International Biometric Society Meeting, Hawaii (June)
- 2014 RAND Corporation (May)
- 2013 Joint Statistical Meetings, Montreal, Canada (August)
- 2013 University of California, Los Angeles, Department of Statistics (May)
- 2013 University of Minnesota, Department of Biostatistics (May)
- 2013 Department of Mathematics, California State University, Fullerton (April)
- 2013 Department of Mathematics and Statistics, California State University, Long Beach (April)
- 2012 National Institute of Diabetes and Digestive and Kidney Diseases Workshop (December)
- 2012 Fred Hutchinson Cancer Research Center (November)
- 2012 University of Washington, Seattle, Department of Biostatistics (November)
- 2012 University of California, Los Angeles, Center for Applied Statistics (October)
- 2012 Marshall School of Business, University of Southern California (September)
- 2012 Department of Mathematics and Statistics, San Diego State University (September)
- 2012 Institute of Mathematical Statistics Annual Meeting, Istanbul, Turkey (July)
- 2012 Western North American/International Biometric Society Meeting, Fort Collins, Colorado (June)

- 2012 University of California, Los Angeles, Department of Statistics (May)
- 2012 Eastern North American/International Biometric Society Meeting, Washington D.C. (April)
- 2012 University of California, Irvine, Department of Statistics (February)
- 2011 RAND Corporation (December)
- 2011 Department of Statistics, University of Kentucky (September)
- 2011 Interface 2011: Statistical, Machine Learning and Visualization Algorithms, Cary, North Carolina (June)
- 2010 University of California, Riverside, Department of Statistics (November)
- 2010 University of Sydney, School of Mathematics & Statistics (November)
- 2010 SAMSI workshop: Interface Functional and Longitudinal Data Analysis, Research Triangle Park, North Carolina (November)
- 2010 University of California, Los Angeles, Department of Biostatistics (October)
- 2010 Institute of Mathematical Statistics Annual Meeting, Gothenburg, Sweden (August)
- 2010 University of California at Davis, Department of Statistics (June)
- 2009 The Methodology Center, Pennsylvania State University (November)
- 2009 Department of Biostatistics, Penn State Health Evaluation Sciences, Hershey, PA (October)
- 2009 Fifth Biannual Conference of the Eastern Mediterranean Region of the International Biometrics Society, Istanbul, Turkey (May)
- 2008 Joint Statistical Meetings, Denver, Colorado (August)
- 2008 International Biometrics Society, Western North American Region (WNAR), University of California, Davis (June)
- 2008 University of Pittsburgh, Department of Statistics (April)
- 2007 Brown University, Department of Community Health, Center for Statistical Sciences, (November)
- 2007 University of California at Davis, Department of Statistics (June)
- 2007 Keystone II Conference: New directions in semiparametric statistics (organized by Raymond Carroll), Colorado (June)
- 2007 Department of Biostatistics, Penn State Health Evaluation Sciences, Hershey, PA (May)
- 2007 Johns Hopkins University, Department of Biostatistics (April)

- 2006 University of Toronto, Department of Statistics (October)
- 2006 International Chinese Statistical Association (ICSA) - Applied Statistics Symposium, University of Connecticut, Storrs (June)
- 2006 Alumni Workshop, Department of Statistics, The Pennsylvania State University (March)
- 2005 Focused Research Group Conference: Nonparametric Models for Complex Biological data, co-sponsored by NSF and IMS, University of California Davis, California (August)
- 2005 Department of Mathematics, Boğaziçi University, Istanbul, Turkey (May)
- 2004 Emory University, Department of Biostatistics
- 2004 University of Maryland, Department of Mathematics and Statistics
- 2004 Ohio State University, Department of Statistics
- 2004 University of South Carolina, Department of Statistics
- 2004 The Pennsylvania State University, Department of Statistics
- 2004 University of California, San Diego, Department of Mathematics
- 2004 University of Washington, Seattle, Department of Biostatistics
- 2004 Harvard School of Public Health, Department of Biostatistics
- 2004 Stanford University, Department of Statistics
- 2002 California State University Sacramento, Sacramento Statistical Association

**Contributed Presentations**

- 2010 SAMSI research program, Analysis of Object Data opening workshop (September)
- 2009 Joint Statistical Meetings, Washington D. C. (August)
- 2006 Institute for Mathematical Statistics (IMS) annual meeting and Brazilian School of Probability, IMPA, Rio de Janeiro, Brazil (August)
- 2006 Western North American Region of the International Biometric Society (WNAR) and the Institute for Mathematical Statistics (IMS) meeting, Flagstaff, Arizona (June)
- 2005 Joint Statistical Meetings, Minneapolis, Minnesota (August)
- 2005 Eighth North American Meeting of New Researchers in Statistics and Probability, Minneapolis, Minnesota (August)
- 2002 International Conference on Current Advances and Trends in Nonparametric Statistics, Crete, Greece (July)

- 2002 International Biometrics Society, Western North American Region, UCLA, Los Angeles CA (June)
- 2002 Frontiers of Statistical Research: 40th Anniversary Conference, Texas A&M University, College Station, Texas (October)

## **EDITORIAL AND PROFESSIONAL SERVICES**

### **Editorial Services**

- Associate Editor* Journal of the Korean Statistical Society (2012-present)
- Advisory Board Member* Turkiye Klinikleri *Journal of Medical Sciences* (2009-present)
- Review Editor* *Frontiers in Statistical Genetics and Methodology* (2011-present)

Reviewer for:

*Annals of Statistics*  
*Biometrics*  
*Biometrika*  
*Communications in Statistics*  
*Journal of the American Statistical Association*  
*Journal of Multivariate Statistics*  
*Journal of Nonparametric Statistics*  
*Journal of the Royal Statistical Society, Series B*  
*Journal of Statistical Planning and Inference*  
*Statistica Sinica*  
*Statistics in Medicine*

Grant Review:

*NIH Biostatistics Study Section (BMRD), June 2014*

### **Professional Services**

- Organizer and Chair, Invited Session on ``Advances in Modeling Count Data'', 2014 Western North American Region of the International Biometric Society (WNAR) Meeting, Hawaii
- Elected Member, Western North American Region of the International Biometric Society (WNAR) Regional Committee Representative (2013-2016)
- Invited Member, International Statistical Institute (ISI) Young Statisticians Committee (2011-present)
- Invited Member, Institute of Mathematical Statistics (IMS) New Researchers Committee (2006-2009)

- Organizer and Chair, Invited Session on “Statistical Approaches for Modeling Mortality and Risk Factors in End-stage Renal Disease”, 2013 Joint Statistical Meetings, Montreal, Canada
- Chair, Contributed Session on “Nonparametric Rank-based Methods”, 2013 Joint Statistical Meetings, Montreal, Canada
- Chair, Invited Session on “Functional Data Analysis”, 2012 Eastern North American/ International Biometric Society Meeting, Washington D.C.
- Chair, Contributed Session on “Longitudinal Data Analysis”, 2009 Fifth Biannual Conference of the Eastern Mediterranean Region of the International Biometrics Society, Istanbul, Turkey
- Chair, Invited Session on “Longitudinal Data Analysis”, 2006 International Chinese Statistical Association (ICSA) - Applied Statistics Symposium, University of Connecticut, Storrs
- Organizer and Session Chair, Invited Session on “Analysis of Longitudinal Data”, 2006 Institute for Mathematical Statistics (IMS) annual meeting and Brazilian School of Probability, IMPA, Rio de Janeiro, Brazil

## **UNIVERSITY SERVICES**

### **University of California, Los Angeles**

- Diversity Committee, School of Public Health (2014-present)
- Departmental representative for the Legislative Assembly Academic Senate (2014-present)
- Member, Qualifying Exam Committee (2011-present)
- Member, Faculty Search/Hiring Committee (2011-2012)

### **The Pennsylvania State University**

- Chair, Undergraduate Program (2007-2008)
- Assistant Chair, Undergraduate Program (2006-2007, 2008-2010)
- Member, Undergraduate Program Committee (2006-2010)
- Undergraduate Advisor (2006-2010)
- Department Representative, College of Science Undergraduate Education
- Advising Committee (UEAC), Co-op, and Study Abroad (2007-2008)

- Chair, Colloquium Committee (Spring and summer of 2006)
- Chair, Masters Qualifying Exam Committee (2006-2007)
- Member, Ph.D. Exam Committee (January 2005)

**University of California, Davis**

- Member, Recruitment Advisory Committee for Dean of Mathematical and Physical Sciences (11/2002-04/2003)
- Graduate Student Peer Advisor (2002-2003)