Curriculum Vitae
Robert T. Krafty

Department of Biostatistics & Bioinformatics
Rollins School of Public Health
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Research Interests:

Methodological: Time Series; Signal Analysis; Multilevel Data; Longitudinal Data; Bayesian Methods; Functional Data; High-Dimensional Data Analysis

Collaborative: Mental & Behavioral Health; Mobile Health; Sleep; Stress; Neuroscience.

Education:

University of Pennsylvania, Philadelphia, PA
PhD in Biostatistics 2007
MA in Mathematics 2002

SUNY at Stony Brook, Stony Brook, NY
BS in Mathematics & Dance, magna cum laude, Honors College 2000

Academic Positions:

Rollins Professor of Biostatistics & Bioinformatics, Emory University	2021-Present
Chair of Biostatistics & Bioinformatics, Emory University	2020-Present
Adjunct Professor of Biostatistics, University of Pittsburgh	2020-2024
Acting Professor of Biostatistics & Bioinformatics, Emory University	2020-2021
Associate Professor of Biostatistics, University of Pittsburgh	2015-2020
Director, Graduate Programs in Statistics, Temple University	2014-2015
Assistant Professor of Statistics, Temple University	2013-2016
Assistant Professor of Statistics, University of Pittsburgh	2007-2013

Published Peer-Reviewed Journal Articles and Conferences:

*first authored by a primary trainee

Methodological:

1. *Namdari J, **Krafty RT**, Manatunga AK (In Press) "P3LS: Point Process Partial Least Squares." *Biometrics*.

2. *Namdari J, Manatunga AK, Ferrarelli F, **Krafty RT** (In Press) "Localized Sparse Principal Component Analysis of Multivariate Time Series in the Frequency Domain." *Journal of the American Statistical Association*.

3. Manyam R, Yun J, Lou P, Scott LN, **Krafty RT** (2026) "Predicting Risk Factors for Suicidal Ideation using Interpretable Artificial Intelligence Methods." *IEEE International Conference on Bioinformatics and Biomedicine* (*BIBM*). 7028-7035.

4. *Fu H, Tang L, Rosen O, Hipwell AE, Huppert TJ, **Krafty RT** (2024) "Covariate-Guided Bayesian Mixture of Spline Experts for the Analysis of Multivariate High-Density Longitudinal Data." *Biostatistics.* 25(3): 666-680.

5. Nezampour S, Nematollahi AR, **Krafty RT**, Maadooliat M (2024) "A New Approach to Nonparametric Estimation of Multivariate Spectral Density Function using Basis Expansion." *Computational Statistics*. 39: 3625-3641.

6. *Tuft M, Hall MH, **Krafty RT** (2023) "Spectra in Low-rank Localized Layers (SpeLLL) for Interpretable Time-Frequency Analysis." *Biometrics*. **79**(1): 304-318.

7. *Zhang J, Siegle G, Sun T, D'Andrea W, **Krafty RT** (2023) "Interpretable Principal Components Analysis for Multilevel Multivariate Functional Data." *Biostatistics*. **24**(2): 227-243.

8. Zhang X, Santosa H, **Krafty RT**, Huppert T (2023) "Brain space image reconstruction of functional near-infrared spectroscopy (fNIRS) using a novel Bayesian adaptive fused sparse overlapping group lasso (Ba-FSOGL) model." *Neurophotonics*. 10(2):023516.

9. Li X, Chang C-CH, **Krafty RT**, Donohue JM (2022) "A Competing Risks Regression Model for The Association Between Time-Varying Opioid Exposure and Risk of Overdose." *Statistical Methods in Medical Research*. **31**(6): 1013-1030.

10. *Li Z, Rosen O, Ferrarelli F, **Krafty RT** (2021) "Adaptive Spectral Analysis of High-dimensional Nonstationary Time Series." *Journal of Computational and Graphical Statistics*. **30**(3):794-807.

11. *Bruce SA, Tang CY, Hall MH, **Krafty RT** (2020) "Empirical Frequency Band Analysis of Nonstationary Time Series." *Journal of the American Statistical Association*. **115**(532):1993-1945.

12. *Ding, T, Cohen AD, O'Connor EE, Karim H, Crainiceanu A, Muchelli J, Lopez OL, Klunk WE, Aizenstein HJ, **Krafty RT**, Crainiceanu CM, Tudorascu DL. (2020) "An Improved Algorithm of White Mater Hyperintensity Detection in Elderly Adults. *Neuroimage Clinical*. **25**:102151.

13. *Beer JC, Aizenstein HJ, Anderson SJ, **Krafty RT** (2019) "Incorporating Prior Information with Fused Sparse Group Lasso: Application to Prediction of Clinical Measures from Neuroimages." *Biometrics*. **75**(4):1299-1209.

14. **Krafty RT**, Fu H, Graves JL, Bruce SA, Hall MH, Smagula SF (2019) "Measuring Variability in Rest-Activity Rhythms from Actigraphy with Application to Characterizing Symptoms of Depression." *Statistics in Biosciences.* **11**:314-333.

15. *Li Z, **Krafty, RT** (2019) "Adaptive Bayesian Time-Frequency Analysis of Multivariate Time Series." *Journal of the American Statistical Association*. **114**(525): 453-465.

16. *Bruce SA, Hall MH, Buysse DJ, **Krafty RT** (2018) "Conditional Adaptive Bayesian Spectral Analysis of Nonstationary Biomedical Time Series." *Biometrics*. **74**(1): 260-269.

17. **Krafty RT,** Rosen O, Stoffer DS, Buysse DJ, Hall M (2017) "Conditional Spectral Analysis of Replicated Multiple Time Series with Application to Nocturnal Physiology." *Journal of the American Statistical Association*. **112**(520): 1405-1416.

18. *Gilbert E, **Krafty RT**, Bleicher R, Egleston B (2017) "On Justifying the Use of Summary Comorbidity Measures for Health Services Research." *Health Services & Outcomes Research Methodology*. **17**(4), 237-255.

19. He F, Mazumdar S, Tang G, Bhatia T, Anderson SJ, Dew MA, **Krafty RT**, Nimagonkar V, Deshpande S, Hall MH, Reynolds III, CF (2017) "Nonparametric MANOVA Approaches for Non-Normal Multivariate Outcomes with Missing Data." *Communications in Statistics*. **46**(14): 7188-7200.

20. **Krafty RT** (2016) "Discriminant Analysis of Time Series in the Presence of Within-Group Spectral Variability" *Journal of Time Series Analysis*. **37**: 435-450.

21. **Krafty RT**, Zhao M, Buysse DJ, Thayer J, Hall MH (2014) "Spectral Analysis of Heart Rate Variability through Penalized Sum-of-Squares." *Statistics in Medicine*. **33**: 1383-1394.

22. **Krafty RT**, Collinge WO (2013) "Penalized Multivariate Whittle Likelihood for Power Spectrum Estimation." *Biometrika*. **100**: 447-458.

23. **Krafty RT**, Hall MH (2013) "Canonical Correlation Analysis Between Time Series and Static Outcomes, with Application to the Spectral Analysis of Heart Rate Variability" *Annals of Applied Statistics.* **7**: 570-587.

24. **Krafty RT**, Xiong S, Stoffer DS, Buysse DJ, Hall MH (2012) "Enveloping Spectral Surfaces: Covariate Dependent Spectral Analysis of Categorical Time Series." *Journal of Time Series Analysis*. **33**: 797-806.

25. Park T, **Krafty RT**, Sanchez AI (2012) "Bayesian Semi-Parametric Analysis of Change-Point Regression Models: Application to Policy Making in Cali, Colombia." *Journal of Applied Statistics*. **39**: 2285-2298.

26. **Krafty RT**, Hall MH, Guo W (2011) "Functional Mixed Effects Spectral Analysis." *Biometrika*. **98**: 583-598.

27. **Krafty RT**, Gimotty PA, Cookous G, Holtz DO, Guo W (2008) "Varying-Coefficient Model with Unknown Within-Subject Covariance for the Analysis of Tumor Growth Curves." *Biometrics.* **64**, 1023-1031.

Collaborative:

28. Suvada K, Vaccarino VL, Elon L, She H, Lobelo F, Sullivan S, Osei J, Gold ME, Yadalam AK, Jain V, Razavi AC, **Krafty RT**, Shah AJ. (In Press). "Association of Sex and Race with Leisure Physical Activity Among Adults After Myocardial Infarction." *Journal of Physical Activity and Health*.

29. Kondas A, Ahluwalia V, Siegle G, McDermott T, Guelfo A, Fulton T, Elbasheir A, Karkare M, Ely T, Johnston T, Krawczak R, Krafty RT, Fani N. (2026). "Good vibrations: Sternal vibration enhances white matter density and interoceptive awareness." *Neuropsychopharmacology*.

30. Pearcy LB, Costa AP, Butters MA, **Krafty RT**, Boyd BD, Banihashemi L, Szymkowicz SM, Landman BA, Ajilore O, Taylor WD, Andreescu C, Karin HT. (2026). "Longitudinal changes in white matter hypointensities in recurrent late-life depression." *Geriatric Psychiatry*. 34(6): 844-856.

31. Dickey AS, Reddy V, Rashied AA, Pedersen NP, **Krafty RT** (2026). "Bayesian Estimation Improves Prediction of Outcomes after Epilepsy Surgery." *Annals of Clinical and Translational Neurology.* 13(3): 618-621.

32. *Zhang G, **Krafty RT**, Smagula SF. (2026). "Comparison of rest-activity rhythm metrics from Apple Watch and ActiGraph devices Comparison of two devices' RAR metrics." *Sleep*. 49(5):zsaf359.

33. Cantos VD, Ferencsik K, Sheth AN, Sales JM, Batina I, Chang E, Krafty R, Aldredge A, Baker D, Reyna K, Duarte AP, Roth G, Lora M. (2025). "PrEP Care Continuum at an Urban Safety-Net Healthcare Program in Atlanta During its First Three Years of Implementation." *AIDS & Behavior.* 29(12): 3940-3949.

34. Scott LN, Banica Malcolm I, Brown SL, Hernandez Valencia SM, **Krafty RT**, Slavich GM (2025). "Interpersonal and targeted rejection life stressors are proximal risk factors for suicidal ideation and behavior." *Psychological Medicine*. 55: e271, 1-10.

35. Gerlach A, Karim H, Kolobaric A, Boyd B, Kahru K, **Krafty RT**, Ajilore O, Taylor W, Andreescu C (2025). "Network homeostasis: functional brain network alterations and relapse in remitted late-life depression." *Neuropsychopharmacology*. 50(10): 1493-1501.

36. Sun L-K, Farrel LM, LaSorda KR, **Krafty RT**, Lim G (2025). "Psychophysical correlates of labor pain intensity and unpleasantness." *Journal of Psychosomatic Obstetrics & Gynecology.* 46(1):2527670.

37. Wood KA, Jin Y, **Krafty RT**, James JH, Iyer SK, Badhwar N (2025). "Concurrent Validity Testing of the Patient Perspective of Arrhythmia Questionnaire." *Health and Quality of Life Outcomes*. 23(1):59.

38. Mobini Z, Saati A, Ayer T, Cui X, **Krafty RT**, Sox-Harris A, Massaweh N (2025) "Risk Adjusted Continuous Monitoring of Postoperative Mortality after Cardiac Surgery." *Heath Services Research*. 60(4):e14607.

39. Smagula SF, Zhang G, Albert S, Lim S, Harvey AG, Irwin MR, McCall WV, Reynolds CF, Buysse DJ, **Krafty RT.** (2025). Actigraphy-measured sleep/wake characteristics associated with suicidal ideation in older adults who have depression and high suicide risk. *Journal of Clinical Psychiatry*. 86(3):24m15522.

40. Pearcy LB, Karim HT, Butters MA, **Krafty RT**, Boyd BD, Banihashemi L, Szymkowicz SM, Landman BA, Ajilore O, Taylor WD, Andreescu C. (2025). "White matter hyperintensities and relapse risk in late-life depression." *Journal of Affect Disorders*. 383: 298-305.

41. McDermott TJ, Siegle GJ, Guelfo A, Huynh K, Karkare MC, Krawczak R, Johnston A, Semerod J, Jagadeesh D, Elbasheir A, Fulton TM, **Krafty RT**, Fani N. (2025) "Find your rhythm and regulate: Breath-synced vibration feedback during breath-focused mindfulness reduces respiration variability in trauma-exposed adults." *Journal of Anxiety Disorders*. 112: 103008.

42. Kraynak T, Karim H, Banihashemi L, **Krafty RT**, Butters M, Ajilore O, Taylor W, Andreescu C (2025) "Brain and cardiovascular responses to acute stress in remitted and recurrent late-life depression." *Neuropsychopharmacology*. 50: 956-964.

43. *Awan N, Kumar R, Juengst S, *DiSanto D, Harrison-Felix C, Dams-O'Connor K, Pugh MJ, Zafonte R, Walker W, Szaflarski J, **Krafty RT**, Wagner A (2025) "Development of Individualized Risk Assessment Models for Predicting Post-Traumatic Epilepsy 1 and 2 years after moderate-to-severe Traumatic Brain Injury: A Traumatic Brain Injury Model System Study." *Epilepsia*. 66:482-498.

44. Taylor WD, Butters MA, Elson D, Szymkowicz SM, Jennette K, Baker K, Renfro B, Georgaras A, **Krafty RT**, Andreescu C, Ajilore O. (2025) "Reconsidering remission in recurrent late-life depression: Clinical presentation and phenotypic predictors of relapse following successful antidepressant treatment." *Psychological Medicine*. 54: 4896-4907.

45. Karim HT, Gerlach A, Butters MA, **Krafty RT**, Boyd BD, Banihashemi L, Landman BA, Ajilore O, Taylor WD, Andreescu C. (2025) "Brain age is not a significant predictor of relapse risk in late-life depression." *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*. 10(1):103-110.

46. Donati FL, Mayeli A, Nascimento Couto BA, **Krafty RT**, Casali AG, Ferrarelli F. (2025). "Prefrontal oscillatory slowing in early-course schizophrenia is associated with worse cognitive performance and negative symptoms: a TMS-EEG study." *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*. 10(2):158-166.

47. Smagula SF, *Zhang G, **Krafty RT**, Ramos A, Sotres-Alvarez D, Rodakowski J, Gallo LC, Lamar M, Gujral S, Fischer D, Tarraf W, Mossavar-Rahmani Y, Redline S, Stone KL, Gonzalez HM, Patel SR. (2024). "Sleep-wake behaviors associated with cognitive performance in middle-aged participants of the Hispanic Community Health Study / Study of Latinos." *Sleep Health*. 10(4): 500-507.

48. Lau SCL, Zhang G, Rueschman M, Li X, Irwin MR, **Krafty RT**, McCall WV, Skidmore E, Patel SR, Redline S, Smagula SF. (2024). "Sleep-wake behavioral characteristics associated with depression symptoms: Findings from the Multi-Ethnic Study of Atherosclerosis." *Sleep*. 47(4): zsae045.

49. Smagula SF, Gasperetti CE, Buysse DJ, Irwin MR, **Krafty RT**, Lim SE, Reynolds CF, McCall WV, Harvey AG. (2024). "Efficacy of the Transdiagnostic Intervention for Sleep and Circadian Dysfunction for depression symptoms and sleep-wake disruption in older and younger adults: secondary age-stratified analysis of a randomized controlled trial." *American Journal of Geriatric Psychiatry*. 32(4): 478-488.

50. Taylor WD, Ajilore O, Karim HT, Butters MA, **Krafty RT**, Boyd BD, Banihashemi L, Szymkowicz SM, Ryan C, Hassenstab J, Landman BA, Andreescu C. (2024) "Assessing depression recurrence, cognitive burden and neurobiological homeostasis in late life: Design and rationale of the REMBRANDT study." *Journal of Mood and Anxiety Disorders*. 5: 100038.

51. Stahl ST, Kazan J, Lazzari T, **Krafty RT**, Reynolds CF, Rollman B, Smagula SF, Gebara MA. (2023). "Complicated grief after the COVID-19 death of a marital partner in late life." *American Journal of Geriatric Psychiatry*. 32(3): 386-391.

52. Tyagi S, Resnick N, Clarkson N, Zhang G, **Krafty RT**, Perera S, Subramanya A, Buysse DJ (2023). "Impact of Sleep on Chronobiology of Micturition among Healthy Older Adults Accepted for publication." *American Journal of Physiology-Renal Physiology.* 325(4): 407-417.

53. Jain N, Lehrer HM, Chin BN, Tracy EL, Evans MA, **Krafty RT**, Buysse DJ, Hall MH (2023). "Heart rate and heart rate variability following sleep deprivation in retired night shift workers and retired day workers." *Psychophysiology*. 60:e14374.

54. Runk A, Lehrer HM, Butters MA, Buysse DJ, Evans MA, **Krafty RT**, Hall MH. (2023). "Retired night shift workers exhibit poorer neurocognitive function compared to retired day workers." *Sleep*. 46(12):1-6.

55. Hipwell AE, Tung I, Sherlock P, Tang X, McKee K, McGrath M, Alshawabkeh A, Bastain T, Breton CV, Cowell W, Dabelea D, Duarte CS, Dunlop AL, Ferrera A, Herbstman J, Hockett C, Karagas MR, Keenan K, **Krafty RT**, Monk C, Nozadi SS, O'Connor TG, Oken E, Osmundson SS, Schantz S, Wright R, Comstock SS, Program Collaborators for Environmental influences on Child Health Outcomes (2023). "Impact of Sedentary Behavior and Emotional Support on Prenatal Psychological Distress and Birth Outcomes During the COVID-19 Pandemic." *Psychological Medicine*. 53(14): 1-14.

56. Kazan J, Lyew T, Croswell E, Buysse DJ, Gebara MA, Karp JF, **Krafty RT**, Rashied AA, Reynolds CF, Rollman BL, Smagula SF, Stahl ST. (2023) "Digital Health Intervention to Stabilize the 24-hour Rhythm of Sleep, Meals, and Physical Activity for Reducing Depression among Older Bereaved Spouses: Protocol for a Randomized Controlled Trial." *Contemporary Clinical Trials*. 124:107016.

57. Stahl ST, Skidmore E, Kringle E, Shih M, Baum C, Hammel J, **Krafty RT**, Covassin N, Li J, Smagula SF. (2023) "Rest-activity rhythm characteristics associated with depression symptoms in stroke survivors." *Archives of Physical Medicine and Rehabilitation*. 104(8): 1203-1208.

58. Hipwell AE, Tung I, **Krafty RT**, Leong AW, Spada M, Vaccaro H, Homitsky SC, Moses-Kolko E, Keenan K (2023) "A Lifespan Perspective on Depression in the Postpartum Period in a Racially and Socioeconomically Diverse Sample of Young Mothers." *Psychological Medicine*. 53(10):4415-4423.

59. Tracy E, Zhang J, Wilkinson K, **Krafty RT**, Hasler BP, Hall MH, Buysse DJ. (2022) "Homeostatic response to sleep deprivation and circadian rhythmicity are intact in older adults with insomnia." *Sleep*. **45**(9).

60. Smagula SF, Zhang G, Gujral S, Covassin N, Li J, Taylor WD, Reynolds CF III, **Krafty RT** (2022) "Twenty-four Hour Activity Pattern Phenotypes Cross-Sectionally Associated with Depression Symptoms and Cognition Performance in Aging." *JAMA Psychiatry*. 79(10): 1023-1031.

61. Huang M, Bliwise DL, Shah A, Johnson DA, Clifford GD, Hall MH, **Krafty RT**, Goldberg J, Sloan R, Ko Y-A, Da Poian G, Murrah N, Levantsevych OM, Shallenberger L, Adbulbaki R, Vaccarino V (2022) "The Temporal Relationship between Sleep Disturbance and Autonomic Dysregulation: A Co-Twin Control Study." *International Journal of Cardiology*. 632: 176-182.

62. Chin BN, Kahru KM, Lehrer HM, Stahl ST, **Krafty RT**, Hall MH, Buysse DJ, Smagula SF (2022) "Patterns Associated with Depression Symptoms in Retired Day and Night Shift Workers." *Mental Health and Physical Activity.* 23: 100467.

63. Anderst W, Charles S, Zarei M, Mani A, Frankston N, Hammersley E, Zhang G, Hogan M, **Krafty RT** (2022) "Using Simultaneous Confidence Bands to Calculate the margin of Error in Estimating Typical Biomechanical Waveforms." *Journal of Applied Biomechanics*. 38(4): 232-236.

64. Williams PC, Alhasan DM, **Krafty RT**, Coutts C, Miles-Richardson S, Jackson CL (2022) "A Mixed methods Approach to Understand Greenspace Redevelopment in Relation to Objectively- and Subjectivity-Measured Sleep Health among Black Adults in Southwest Atlanta." *Health and Place*. 76:102812.

65. Lehrer HM, Zhang G, Matthews KA, **Krafty RT**, Evans MA, Taylor BJ, Hall MH (2022) "Blood Pressure Cuff Inflation Briefly Increases Adolescent Females' Restlessness During Sleep on The First but Not Second Night of Ambulatory Blood Pressure Monitoring." *Psychosomatic Medicine.* 84(7): 828-835.

66. Hutchins F, El Khoudary SR, Catov J, **Krafty RT**, Colvin A, Barinas-Mitchell E, Brooks MM (2022) "Excessive Gestational Weight Gain and Long-Term Maternal Cardiovascular Risk Profile: The Study of Women's Health Across the Nation." *Journal of Women's Health*. 31(6):808-818.

67. Dickey AS, **Krafty RT**, Pedersen NP (2022) "Ordinal Regression Increases Statistical Power to Predict Epilepsy Surgical Outcomes." *Epilepsia Open*. **7**:344-349.

68. Smagula SF, Stahl ST, **Krafty RT**, Buysse DJ (2022) "Initial Proof of Concept that a Consumer Wearable Can Be Used for Real-Time Rest-Activity Rhythm Monitoring." *Sleep*. **45**(3): 1-3.

69. Lehrer HM, Yao Z, **Krafty RT**, Evans MA, Buysse DJ, Kravitz HM, Matthews KA, Gold EB, Harlow SD, Samuelsson LB, Hall MH (2022). "Comparing Polysomnography, Actigraphy, and Sleep Diary in the Home Environment: The Study of Women's Health Across the Nation Sleep Study." *Sleep Advances.* **3**(1): zpac001.

70. Keenan K, Fu Haoyi, Tung I, Berona J, Carpio K, **Krafty RT**, Stepp SD, Hipwell AE (2021) "Capturing the Dynamic Nature of Stress Exposure in the Pittsburgh Girls Study." *Social Science & Medicine Population Health*. **16**:100983.

71. Bowman MA, Kline CE, Buysse DJ, Kravitz HM, Joffe H, Matthews KA, Bromberger JT, Roecklein K.A, **Krafty RT**, Hall MH (2021). "Longitudinal Association between Depressive Symptoms and Multidimensional Sleep Health: The Study of Women's Health Across the Nation Sleep Study." *Annals of Behavioral Medicine.* **55**(7):641-652.

72. Smagula SF, Karin HT, Ibrahim TS, **Krafty RT**, Stahl ST, Rodakowski J, Reynolds III CF, Hall MH, Aizenstein HJ. (2021) "Resting-State Functional Connectivity Associated with Being a 'Morning-Type' Dementia Caregiver and Having Lower Depression Symptom Severity." *Journal of Gerontology, Series B*. **76**(6):1071-1076.

73. Kato K, Shin YJ, Palumbo S, Papageorgiou I, Hahn S, Irish J, Rounseville S, **Krafty RT**, Wollin L, Sauler M, Hecker L (2021) "Leveraging Aging Models of Pulmonary Fibrosis; The Efficacy of Nintedanib in Aging." *European Respiratory Journal*. **58**(5):2100759

74. *Mani A, Santini T, Puppala R, Dahl M, Venkatesh S, Walker E, Dehaven M, Isitan C, Ibrahim TS, Wang L, Zhang T, Gong E, Barrios-Martinez J, Yeah F-C, **Krafty RT**, Mettenburg JM, Xia Z. (2021) "Applying Deep Learning to Accelerated Clinical Brain Magnetic Resonance Imaging for Multiple Sclerosis." *Frontiers Neurology*. **12**:1659.

75. Noorbakhsh K, Zuckerbraun NS, Manole MD, Williams A, Langhan J, Wu L, **Krafty RT**, Furtado A. (2021) "Management and Outcomes of Spontaneous Pneumomediastinum in Children." *Pediatric Emergency Care*. **34**(12): 1051-1056.

76. *Gerlach A, Karim H, Kazan J, Aizenstein H, **Krafty RT**, Andreescu A (2021) "Networks of Worry – Towards a Connectivity-Based Signature of Late-Life Worry Using Higher Criticism." *Translational Psychiatry*. 11(500).

77. Tung I, **Krafty RT**, Delcourt ML, Melhem NM, Jennings JR, Keenan K, Hipwell AE (2021) "Cardiac Vagal Control in Response to Acute Stress during Pregnancy: Associations with Life Stress and Emotional Support." *Psychophysiology*. **58**(6): e13808.

78. Karim HT, Ly M, Yu G, **Krafty RT**, Tudorascu DL, Aizenstein HJ (2021) "Aging Faster: Worry and Ruination in Late Life Are Associated with Greater Brain Age." *Neurobiology of Aging*. **101**: 13-21.

79. Williams PC, **Krafty RT**, Alexander T, Davis Z, Gregory A-V, Proby R, Toxel W, Coutts C. (2021) "Greenspace Redevelopment, Residential Displacement, and Sleep Quality among Black Adults in Southwest Atlanta." *Journal of Exposure Science and Environmental Epidemiology*. 1-15.

80. Smagula SF, Capps CS, **Krafty RT** (2021) "Evaluating the Timing of Differences in Activity Related to Depression Symptoms across Adulthood in the United States." *Journal of Affect Disorders*. **284**: 64-68.

81. Hutchins F, **Krafty RT**, El Khoudary SR, Catov J, Colvin A, Barinas-Mitchell E, Brooks M (2021) Gestational weight gain and long-term maternal obesity risk: A multiple bias analysis. *Epidemiology*. 32(2): 248-258.

82. Graves JL, Qiao Y, Moored KD, Boudreau RM, Venditti EM, **Krafty RT**, Shiroma EJ, Harezlak J, Gynn NW (2021) "Profiles of Accelerometry-derived Physical Activity are Related to Perceived Physical Fatigability in Older Adults." *Sensors*. 21(5):1718.

83. Taylor BJ, Bowman MA, Brindle A, Hasler BP, Roecklein KA, **Krafty RT**, Matthews KA and Hall MH. (2020) "Evening Chronotype, Alcohol Use Disorder Severity, and Emotion Regulation in College Students." *Chronobiology International*. 37(12):1725-1735.

84. Bowman MA, Brindle RC, Joffe H, Kline CE, Buysse DJ, Appelhans BM, Kravitz HM, Matthews KA, Neal-Perry GS, Krafty RT and Hall MH. (2020). "Multidimensional Sleep Health is Not Cross-Sectionally or Longitudinally Associated with Adiposity in the Study of Women's Health Across the Nation." *Sleep Health.* 6(6):790-796.

85. Kubala AG, Buysse DJ, Brindle RC, Krafty RT, Thayer JF, Hall MH and Kine CE. (2020) "The Association between Physical Activity and a Composite Measure of Sleep Health." *Sleep & Breathing*. **24**: 1207-1214.

86. Smagula SF, Stahl ST, Santini T, Banihashemi L, Hall MH, Ibrahim TS, Reynolds CF, **Krafty RT**, Aizenstein HJ, Zhan L. (2020) "White Matter Integrity Underlying Depressive Symptoms in Dementia Caregivers." *American Journal of Geriatric Psychiatry.* **28**(5): 578-582.

87. Tung I, Chung T, **Krafty RT**, Keenan KE, Hipwell AE. (2020) "Alcohol Use Trajectories Before and After Pregnancy Among Adolescent and Young Adult Mothers." *Alcoholism: Clinical and Experimental Research.* **44**(8): 1675-1685.

88. McCormick MC, Sharp E, Kalpatthi R, Zullo J, Gurtunca N, Zhang J, Krafty RT, Raman S. (2020) "Hyperglycemia Requiring Insulin during ALL Induction Chemotherapy Associated with Increased Adverse Outcomes and Healthcare Costs." *Pediatric Blood & Cancer*. **67**(9): e28475.

89. Smagula SF, Hasler B, Schulz R, Graves JL, Reynolds CF, Aizenstein HJ, Buysse DJ, **Krafty RT**, Hall MH. (2019) "Activity Patterns Related to Depression Symptoms in Stressed Dementia Caregivers." *International Psychogeriatrics*. 1-8.

90. Andreescu C, Ajilore O, Aizenstein HJ, Albert K, Butters MA, Landman BA, Karim HT, **Krafty RT**, Taylor WD. (2019) "Disruption of Neural Homeostasis as a Model of Relapse and Recurrence in Late-Life Depression." *American Journal of Geriatric Psychiatry.* **27**(12):1316-1330.

91. Bowman MA, Duggan KA, Brindle RC, Kline CE, **Krafty RT**, Thayer JF, Hall MH (2019). "Prospective Associations among Objectively and Subjectively Assessed Sleep and the Metabolic Syndrome." *Sleep Medicine*. **58**: 1-6.

92. Smagula S, Gujral S, Capps C, **Krafty RT** (2019). "A Systematic Review of Evidence for a Role of Rest-Activity Rhythms in Dementia." *Frontiers in Psychiatry*. **10**:78.

93. Antony AR, Abramovici S, **Krafty RT**, Pan J, Richardson M, Bagic A, Haneef Z (2019) "Simultaneous Scalp EEG Improves Seizure Laterization During Unilateral Intracranial EEG Evaluation in Temporal Lobe Epilepsy." *Seizure*. **64**: 8-15.

94. Smagula SF, **Krafty RT**, Thayer JF, Buysse DJ, Hall MH. (2018) "Rest-Activity Rhythm Profiles Associated with Manic-Hypomanic and Depressive Symptoms." *Journal of Psychiatric Research.* 102: 238-244.

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96. Brindle RC, Duggan KA, Cribbet MR, Kline CE, **Krafty RT**, Thayer JF, Mulukulata SR, Hall MH. (2018) "Cardiovascular Stress Reactivity and Carotid Intima-Media Thickness: The Buffering Role of Slow-Wave Sleep." *Psychosomatic Medicine*. **80**(3): 301-306.

97. Brindle, R, Cribbet, M, Samuelsson, L, Gao, C, Frank, E, **Krafty, RT**, Thayer, J, Buysse, DJ, Hall, MH (2018) "The Relationship between Childhood Trauma and Poor Sleep Health in Adulthood." *Psychosomatic Medicine*. **80**(2): 200-207.

98. Gedela S, Sitwat, B Welch WP, **Krafty RT**, Sogawa Y. (2018) "The Effects of Vagus Nerve Stimulator in Controlling Status Epilepticus in Children." *Seizure*. **55**(1): 66-69.

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100. Smagula S, **Krafty RT**, Taylor B, Martire L, Schulz R, Hall MH (2017) "Rest-Activity Rhythm and Sleep Characteristics Associated with Depression Symptom Severity in Strained Dementia Caregivers." *Journal of Sleep Research*. **26**(6), 718-725.

101. Kline CE, **Krafty RT**, Mulukutla SR, Hall MH (2017) "Associations of Sedentary Time and Moderate-Vigorous Physical Activity with Sleep-Disordered Breathing and Polysomnographic Sleep in Community-Dwelling Adults." *Sleep and Breathing*. **21**(2), 427-434.

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103. Hall MH, Mulukutla S, Kline CE, Samuelsson LB, Taylor B, **Krafty RT**, Thayer J, Frank E, Kupfer D (2017) "Objective Sleep Duration is Prospectively Associated with Endothelial Health." *Sleep*. **40**(1): 1-9.

104. Samuelson LB, Hall MH, Rangaranjan AA, **Krafty RT**, Buysse DJ, Strollo PJ, Kravitz HM, Zheng H, Shimada K (2017) "Support Vector Machines for Automated Snoring Detection: Proof-of-Concept." *Sleep and Breathing*. **21**(1): 119-133.

105. Mauer LA, Bass SB, Ye D, Benitez J, Mazzella S, **Krafty RT** (2016) "Trend Analysis of Users of a Syringe Exchange Program in Philadelphia, Pennsylvania: 1999-2014." *AIDS and Behavior*. **20**: 2922-2932.

106. *Rothenberger SD, **Krafty RT,** Milligan B, Buysse DJ, Thayer JF, Kravitz HM, Buysse ED, Hall MH (2015) "Time-Varying Correlations between Slow Wave Sleep and Heart Rate Variability in Midlife Women: The SWAN Sleep Study." *Psychophysiology*. **52**: 572-584.

107. Hall MH, Casement MD, Troxel WM, Matthews KA, Bromberger J, Kravitz HM**, Krafty RT**, Buysse DJ (2015) "Chronic Stress is Prospectively Associated with Sleep in Midlife Women: The SWAN Sleep Study." *Sleep*. **38**: 1645-1654.

108. Taylor BJ, Irish LA, Martire LM, Siegle GJ, **Krafty RT**, Schulz R, Hall MH (2015) "Avoidant Coping and Poor Sleep Efficiency in Dementia Caregivers." *Psychosomatic Medicine*. **77**: 1050-1057.

109. Irish LA, Kline CE, Rothenberger SD, **Krafty RT**, Buysse DJ, Kravitz HM, Bromberger JT, Zheng H, Hall MH (2014) "A 24-hour Approach to the Study of Health Behaviors: Temporal

Relationships between Waking Health Behaviors and Sleep." *Annals of Behavioral Medicine*. **14**: 187-197.

110. Sanchez AI, **Krafty RT**, Puyana JC, Gutierrez MI (2013) "Football Events and their Association with Interpersonal Violent Deaths in Cali, Colombia." *Panamerican Journal of Trauma, Critical Care and Emergency Surgery*. **2**: 26-32.

111. Kline CE, Irish LA, **Krafty RT**, Sternfeld B, Kravitz HM, Buysse DJ, Bromberger JT, Dugan SA, Hall MH (2013) "Consistently High Sports/Exercise Activity is Associated with Better Sleep Quality, Continuity, and Depth in Midlife Women: The SWAN Sleep Study." *Sleep*. **36**: 1279-1288.

112. Hall MH, Middelton K, Thayer JF, Lewis TT, Kline CE, Matthews KA, Kravitz HM, **Krafty RT**, Buysse DJ (2013) "Racial Differences in Heart Rate Variability During Sleep: The SWAN Sleep Study". *Psychosomatic Medicine*. **75**: 783-790.

113. Hasler BP, Germaine A, Nofzinger EA, Kupfer DJ, **Krafty RT**, Rothenberger SD, James JA, Bi W, Buysse DJ (2012) "Chronotype and Diurnal Patterns of Positive Affect and Affective Neural Circuitry in Primary Insomnia." *Journal of Sleep Research*. **21**: 515-526.

114. Israel B, Buysse DJ, **Krafty RT**, Beagley A, Miewald J, Hall MH (2012) "Short-term Stability of Sleep and Heart Rate Variability in Good Sleepers and Patients with Insomnia: For Some Measures, One Night Is Enough." *Sleep*. **35**: 1285-1291.

115. Sanchez AI, **Krafty RT**, Weiss HB, Rubian AM, Peitzman AB, Puyana JC (2012) "Trends in Survival and Early Functional Outcomes from Hospitalized Severe Adult Traumatic Brain Injuries, Pennsylvania, US, 1998-2007." *Journal of Head Trauma Rehabilitation*. **27**: 159-169.

116. Siewiorek GM, **Krafty RT**, Wholey MH, Finol EA (2011) "The Association of Clinical Variables and Filter Design with Carotid Artery Stenting Thirty-Day Outcome." *The European Journal of Vascular and Endovascular Surgery.* **42:** 282-291.

117. Sanchez AI, Villaveces A, **Krafty RT**, Park T, Weiss HB, Fabio A, Puyana JC, Gutierrez-Martinez MI (2011). "Policies for Alcohol Restrictions and Their Effects on Interpersonal Violence Deaths: A Time-Series Analysis of Homicides in Cali, Colombia." *International Journal of Epidemiology*. **40**: 1037-1046.

118. Okun ML, **Krafty RT**, Monk T, Reynolds III CF, Buysse DJ, Begley A, Hall MH (2010) "What Constitutes too Long of a Delay? Determining the Cortisol Awakening Response (CAR) Using Self-Report and PSG-Assessed Wake Time." *Psychoneuroendocrinology*. **35**: 460-468.

119. Wiebe DJ, **Krafty RT**, Kopper CS, Nance ML, Elliott MR, Branas CC (2009) "Homicide and Geographic Access to Gun Dealers in the United States." *BMC Public Health*. **9**: 199.

120. Holtz DO, **Krafty RT**, Zhang L, Alagkiozidis I, Courrèges MC, Chu CS, Leiby B, Benencia F, Guo W, Gimotty PA, Coukos G. (2008) "Should Tumor VEGF Expression Influence Decisions on Combining Low-Dose Chemotherapy with Antiangiogenic Therapy?" *Journal of Translational Medicine*. **6**: 2.

121. Orsini JA, Parsons CS, **Krafty RT**, Capewell L, Boston R (2007) "Risk Factors for Acute Laminitis in Horses during Hospitalization: 73 cases (1997-2004)." *Journal of the American Veterinary Association*. **6**, 885-889.

Funding:

Current:

R01MH115922 (Scott) 1/1/2019 - 09/30/2026 0.60 calendar month
NIMH
Role: Co-Investigator
Multimodal Assessment of Near-Term Risk Factors for Suicide

R01GM140476 (Bruce) 9/1/2020 – 8/31/2026 1.80 calendar month0
NIGMS
Role: Co-Investigator
Adaptive Frequency Band Estimation and Analysis

R01MH125816 (Ferrarelli) 9/1/2021 – 7/31/2026 1.84 calendar month
NIMH
Role: Co-Investigator
Enhancing Prefrontal Oscillatory Activity and Working Memory Performance with Noninvasive Brain Stimulation in Early-Course Schizophrenia

R01MH125846 (Smagula) 9/1/2021 – 6/30/2027 1.20 calendar month
NIMH
Role: Co-Investigator
Morning Activation Deficits and Depression Symptoms: Mechanisms and Modifiability in Dementia Caregivers

R01MH130376 (Ferrarelli) 7/1/2023 – 6/30/2028 1.20 calendar month
NIMH
Role: Co-Investigator
Establishing that sleep oscillatory deficits are associated with cognitive dysfunction, can be acutely manipulated, and this manipulation leads to cognitive improvement in early course schizophrenia

R01HL169955 (Lewis) 8/1/2023 – 7/31/2027 1.20 calendar month
NHLBI
Role: Co-Investigator
Sociocultural Shifting, Sleep and Cardiometabolic Risk in African-American Women

R01HL163998 (Shah & Vaccarino) 3/1/2023 – 2/29/2028 0.30 calendar month
NHLBI
Role: Co-Investigator
Investigation of Sex and Gender Differences in Cardiovascular Risk in Rural Communities

R01MH138893 (Fani) 12/1/2024 – 3/31/2029 0.60 calendar month
NIMH
Role: Co-Investigator
Identifying Neural Signatures of Racial Discrimination with a Multivariate, Data Fusion Approach

R01MH137185 (Smagula) 07/01/2024 - 06/30/2029 1.8 calendar month
NIMH
Role: Co-Investigator
Multi-Site, Double-Blind, Randomized-Controlled, Efficacy Trial of the Transdiagnostic Intervention for Sleep and Circadian Dysfunction for Depression Symptoms in Older Adults with high suicide risk

(Grove) 04/1/2024 – 3/31/2027 0.60 calendar month
NIMH
Role: Co-Investigator
DIVA-MS: Daily versus Intermittent Incremental Vestibulo-ocular Reflex Adaptation as a Novel Treatment for Dizziness in People with Multiple Sclerosis

Completed:
R01GM113243 (Krafty) 8/10/2014 - 5/31/2023 2.84 calendar month
NIGMS
Role: PI
A Statistical Framework for the Spectral Analysis of High-Dimensional Physiological Time Series Signals

DMS-0805050 (PI, Stoffer; Co-PI Krafty) 7/1/08 – 6/30/13 2.00 calendar month
NSF
Role: Co-PI
Statistical Methods for Dependent Data

R01HL1104607 (Hall, Martica) 8/1/10-7/30/15 1.20 calendar month
NIH
Role: Co-Investigator
Sleep: a Novel Pathway Linking Major Depression and Cardiovascular Disease

P01AG020677 (Monk) 5/1/10-6/30/15 1.20 calendar month
NIH
Role: Co-Investigator
Aging Well, Sleeping Efficiently

R01AG019362 (Hall) 5/1/10-4/30/11 1.00 calendar month
NIH
Role: Co-Investigator
SWAN Sleep Study

R01MH096334 (Siegle) 9/1/12 – 5/31/18 0.60 calendar month
NIH
Role: Co-Investigator
Blunted and Discordant Affect: A Transdiagnostic Construct in Psychopathology

R01AI127472 (Harris) 9/26/16 – 8/31/18 0.90 calendar month
NIH
Role: Co-Investigator
Whole Genome Sequencing Enhanced Detection System for Healthcare-Associated Transmission

UL1TR001857 (Reis) 7/1/2016 - 6/31/2019 2.40 calendar month
NCATS
Role: Co-Investigator
University of Pittsburgh Clinical and Translational Sciences Institute: Research Methods (BERD) Component

R01AG047139 (Buysse/Hall) 7/1/2015 - 10/31/2019 0.60 calendar month
NIA
Role: Co-Investigator
Sleep, Circadian Rhythms, and Cardiometabolic Risk in Retired Shift Workers

RG16 (Puwanant) 2/1/2017 - 1/31/2020 0.60 calendar month
Muscular Dystrophy Association
Role: Co-Investigator
Sub-regional Body Composition and Clinical Endpoints in Myotonic Dystrophy

DoD #W81XWH1920012 (Wagner) 5/1/2019 – 9/1/2020 0.60 calendar month
State Univ. of New York / DoD
Role: Co-Investigator
Biomarker-Based Precision Medicine Approach to Traumatic Brain Injury Subphenotypes

W81XWH-18-1-0736 (Wagner) 9/15/2018 – 9/14/2020 0.36 calendar month
Department of Defense
Role: Co-Investigator
Epidemiological Characterization and Prognostic Models for PTE: A Collaborative TBI-MS and VHA Study

UG3OD023244 (Hipwell/Keenan) 7/1/2016 - 8/31/2020 1.20 calendar month
NIH
Role: Co-Investigator
Preconception Stress Exposure: Impact on Pregnancy and Offspring Neurodevelopment

R61MH115927 (Young) 1/1/2019 - 8/31/2020 0.48 calendar month
NIMH
Role: Co-Investigator
Amygdala rtfMRI Neurofeedback for Treatment Resistant Depression

R21MH119543 (Ferrarelli) 4/1/2019 – 3/31/2021 0.60 calendar month
NIMH
Role: Co-Investigator
Reduced Natural Oscillatory Frequency of DLPFC in Early Course SCZ: a TMS/EEG Study

R21AG074094 (Smagula) 9/5/2021 - 5/31/2023 1.20 calendar month
NIA
Role: Co-Investigator
Combining Information from Multiple Circadian Activity Rhythm Metrics to Optimally Detect Mild Cognitive Impairment Using a Consumer Wearable

R01EB028248 (Huppert) 8/1/2019 – 4/30/2023 0.84 calendar month

NIBIB
Role: Co-Investigator
Brain AnalyzIR: A software platform for improving scientific rigor in functional NIRS statistical analysis

R21AG060732 (Hall) 9/30/2021 - 7/31/2023 0.48 calendar month
NIA
Role: Co-Investigator
Major Depression and Molecular Senescence: The Role of Sleep

R01MH118270 (Stahl) 8/23/2019 – 5/31/2024 1.20 calendar month
NIMH
Role: Co-Investigator
Efficacy of a Healthy Lifestyle Intervention to Reduce Depression in Older Spousally-bereaved Adults

R01MH116943 (Young) 4/1/2019 – 3/31/2024 0.60 calendar month
NIMH
Role: Co-Investigator
Using fMRI of Autobiographical Memory Recall to Determine Risk and Resilience Endophenotypes in Familial Major Depressive Disorder

R01MH121619 (Andreescu) 1/15/2020 - 11/30/2025 0.60 calendar month
NIMH
Role: Co-Investigator
2/3: Recurrence Markers, cognitive burden and neurological homeostasis in late-life depression

R01HL157323 (Massarweh) 1/1/2022 - 12/31/2025 0.60 calendar month
NHLBI
Role: Co-Investigator
Using Modern Data Science Methods and Advanced Analytics to Improve the Efficiency, Reliability, and Timeliness of Cardiac Surgical Quality Data

R01AT011267 (Fani) 2/1/2021 – 1/31/2026 0.6 calendar month
NIMH
Role: Co-Investigator
Neural Mechanisms of Vibroacoustically Augmented Breath Focused Mindfulness For Dissociative Traumatized People

R21HD109652 (Chandrasekaran) 8/1/2023 – 7/31/2025 0.35 calendar month
NIHDK
Role: Co-Investigator
The Role of Mediobasal Hypothalamic Gliosis in Gestational Weight Gain and Gestational Visceral Fat Accretion

Invited and Plenary Presentations:

Department of Biostatistics, Yale University 03/24/2026

Department of Biostatistics & Data Science, Indiana University	09/26/2025
ASA/IMS Spring Research Conference, New York, NY	06/03/2025
Division of Biostatistics, Memorial Sloan Kettering	04/17/2025
Department of Biostatistics, Vanderbilt University	09/25/2024
Department of Mathematics, Mississippi State University	02/22/2024
School of Mathematical & Statistical Sciences, Clemson University	10/11/2023
Department of Biostatistics and Bioinformatics, University of Rochester	09/20/2023
EcoStat, Kyoto, Japan	08/01/2023
ICSA Applied Symposium, Ann Arbor, MI	06/15/2023
BRIS Workshop on Complex Brain Signals, Oaxaca, Mexico	05/02/2023
CMStatistics, London, UK	12/19/2022
IMS ICSDS, Florence, Italy	12/16/2022
Florida State University, Department of Statistics	10/14/2022
JSM, Washington, DC	07/08/2022
ICSA Summer Symposium, Gainesville, FL	06/22/2022
Statistical Methods in Imaging, Nashville, TN	05/26/2022
ENAR, Houston, TX	03/30/2022
Research Roundtable, Emory School of Nursing	12/07/2021
Emory Global Diabetes Research Center	12/01/2021
Marquette University, Department of Mathematical Sciences	11/19/2021
Georgia CTSA Annual Workshop	10/22/2021
Georgia Statistics Day	10/11/2021
National University of Singapore, Department of Statistics	10/6/2021
ASA's Statistical Methods in Imaging Conference, Atlanta, Georgia	5/20/2021
EUSleep, Atlanta, Georgia	10/30/2020
University of Pittsburgh, Department of Biostatistics	10/8/2020
AMS Central Sectional Meeting, El Paso, TX	9/12/2020
Baruch College, Department of Information Science & Statistics	3/10/2020
Emory University, Department of Biostatistics and Bioinformatics	2/20/2020
CMStatistics, London, UK	12/17/2019
Statistics & Data Science Workshop, KAUST, Thuwal, Saudi Arabia	11/19/2019
University of South Carolina, Department of Statistics	10/31/2019
University of California Los Angeles, Department of Biostatistics	10/16/2019
JSM, Denver, CO	7/31/2019
Emory University, Department of Biostatistics and Bioinformatics	4/4/2019
CMStatistics, Pisa, Italy	12/17/2018
George Mason University, Department of Statistics	11/9/2018
University of Illinois, Chicago, Division of Epidemiology and Biostatistics	11/2/2018
Virginia Commonwealth University, Department of Biostatistics	9/21/2018
ICSA Applied Statistics Symposium, New Brunswick, NJ	6/14/2018
Institute for Mathematics and its Applications, Minneapolis, MN	2/21/2018
CMStatistics, London, UK	12/17/2017
University of Minnesota, Department of Biostatistics	10/18/2017
Indiana University School of Medicine, Department of Biostatistics	8/25/2017
ISI World Statistics Congress, Marrakech, Morocco	7/20/2017
International Conference on Computational Statistics, Oviedo, Spain	8/23/2016
JSM, Chicago, IL	7/30/2016
ICSA Applied Statistics Symposium, Atlanta, GA	6/14/2016
IASC: Statistical Computing for Data Science, Buzios, Brazil	8/2/2015

ISI World Statistics Congress, Rio De Janeiro, Brazil	7/27/2015
University of Texas, El Paso, Department of Mathematical Sciences	4/17/2015
University of Pittsburgh, Department of Biostatistics	1/22/2015
University of Pennsylvania, Division of Biostatistics	12/9/2014
Thomas Jefferson University, Division of Biostatistics	11/6/2014
NBER/NSF Annual Time Series Conference, St. Louis, MO	9/27/2014
University of Missouri, Department of Statistics	9/25/2014
ENAR Spring Meeting, Baltimore, MD	3/17/2014
ICSA Winter Meeting, Hong Kong	12/20/2013
Temple University, Department of Statistics	11/1/2013
Columbia University, Division of Biostatistics (Psychiatry)	10/15/2013
JSM, Montreal, Quebec	8/6/2013
Fox Chase Cancer Center	2/25/2013
Temple University, Department of Statistics	2/24/2013
ENAR Spring Meeting, Orlando, FL	3/10/2013
NBER/NSF Annual Time Series Conference, College Station, TX	10/26/2012
Temple University, Department of Statistics	10/19/2012
University of Pennsylvania, Division of Biostatistics	11/8/2011
Clarkson University, Department of Mathematics	10/13/2011
JSM, Vancouver, BC	8/2/2010
WNAR Annual Meeting, Seattle, WA	6/19/2010
Conference on Nonparametric Statistics and Learning, Columbus, OH	5/21/2010
ENAR Spring Meeting, New Orleans, LA	3/22/2010
Brown University, Center for Statistical Science	9/12/2009
University of Pittsburgh, Department of Biostatistics	9/10/2009
Meeting of the Classification Society	6/12/2009
Penn State University, Department of Statistics	2/8/2009
ENAR Spring Meeting, Washington, DC	3/23/2008
University of Wisconsin, Departments of Biostatistics and Statistics	2/28/2007
University of Pittsburgh, Department of Statistics	2/19/2007
George Washington University, Department of Statistics	2/13/2007
University of Florida, Department of Biostatistics	2/6/2007
Harvard School of Medicine	2/2/2007
The Ohio State University, Department of Biostatistics	2/1/2007
Virginia Commonwealth University, Departments of Biostatistics	11/3/2006
JSM, Seattle, WA.	8/9/2006
ENAR Spring Meeting, Tampa, FL.	3/27/2006
University of Pennsylvania, Division of Biostatistics	2/14/2006

Honors and Awards:

Fellow of the American Statistical Association	2023
Philips Innovation Grand Challenge	2016
D. Raghavarao Publication Award	2014
Award for High Achievement in Sponsored Projects, Fox School	2014
Saul Winegrad Award	2008
ENAR Travel Award	2006
University of Pennsylvania's Award for Outstanding Teaching	2002
Barry Goldwater Scholarship	1999
Phi Beta Kappa	1998

Student Supervision:

PhD Dissertation Advisor:

Current

Sekha Daluwatumulle – Biostatistics, Emory University 2024 –
Daisy Liao – Biostatistics, Emory University 2026 -

Past (Affiliation)**:**

Scott Rothenberger - Statistics, University of Pittsburgh 2014
(Assistant Professor of Medicine, University of Pittsburgh)
Elizabeth Gilbert - Statistics, Temple University 2016
(Associate Professor of Mathematics, Worcester State University)
Scott Bruce - Statistics, Temple University 2018
(Associate Professor of Statistics, Texas A&M University)
Zeda Li - Statistics, Temple University 2018
(Associate Professor of Statistics, Baruch College, CUNY)
Joanne Beer – Biostatistics, University of Pittsburgh 2018
(Biostatistics Senior Scientist II, Alamar Biosciences)
Marie Tuft – Biostatistics, University of Pittsburgh 2020
(R&D Statistician, Sandia National Labs)
Jun Zhang – Biostatistics, University of Pittsburgh 2020
(Manager, Statistical Analysis, Astellas)
Terry Ding - Biostatistics, University of Pittsburgh 2020
(Sr. Applied Scientist, Amazon Web Services)
Haoyi Fu – Biostatistics, University of Pittsburgh 2022
(Biostatistician, Novartis)
Gehui Zhang – Biostatistics, University of Pittsburgh 2024
(Assistant Professor, Southwest Petroleum University)

MS Thesis/Capstone Advisor:

Current

Emma Dunne - Biostatistics, Emory University 2025

Past (Affiliation)**:**

Clair Smith - Biostatistics, University of Pittsburgh 2017
(Biostatistician, School of Health & Rehabilitation Science,
University of Pittsburgh)
Wendy He - Biostatistics, University of Pittsburgh 2017
(Sr. Decision Support Analyst, Highmark Health)
Sunny (Zhao) Thorn - Biostatistics, University of Pittsburgh 2017
(Tech Lead, Applied AI & ML, Cendyn)
Jessica Graves - Biostatistics, University of Pittsburgh 2018
(Statistics Manager, Loyal Cellular Longevity)
Jianhui Zhu - Biostatistics, University of Pittsburgh 2019
(Research Assistant Professor, UPMC Heart and Vascular Institute)
Chandler Capps - Biostatistics, University of Pittsburgh 2020
(Statistical Consultant, Pittsburgh)
Ashika Mani – Biostatistics, University of Pittsburgh 2021
(Statistical Analyst, University of Pennsylvania)

Katie Liu – Biostatistics, Emory University 2022
(Biostatistician, Children's Healthcare of Atlanta)
Clair Williams – Biostatistics, Emory University 2025
(Data Analyst, Emory School of Medicine)

PhD Committee Member:
Current:
Danlu Zhang – Biostatistics, Emory University 2024 -

Past:
Seo Hyon Baik - Statistics, University of Pittsburgh 2010
Dongli Zhou - Statistics, University of Pittsburgh 2010
Mengyuan Zhao - Statistics, University of Pittsburgh 2010
Gail Sieworek – Bioengineering, Carnegie Mellon University 2010
Nan Zhou - Statistics, University of Pittsburgh 2011
Jonathan Livengood – History & Philosophy of Science, University of Pittsburgh 2011
Zhigang Yao - Statistics, University of Pittsburgh 2011
Hyewook Jeong - Statistics, University of Pittsburgh 2012
Qi Zhang - Statistics, University of Pittsburgh 2013
Fanying He - Biostatistics, University of Pittsburgh 2013
Ken-Hsien Chuang – Mathematics, University of Pittsburgh 2014
Yanyan Li – Statistics, Temple University 2014
Alvaro Sanchez - Clinical & Translational Science, University of Pittsburgh 2015
Jing Xiao – Statistics, Temple University 2015
Ke Huang – Statistics, Temple University 2015
Andrew Gehman – Statistics, Temple University 2015
Andrew Potter – Biostatistics, University of Pittsburgh 2016
Masaki Lin - Biostatistics, University of Pittsburgh 2017
Brianna Taylor – Psychology, University of Pittsburgh 2017
Charles Ma – Biostatistics, University of Pittsburgh 2018
Brian Rooks – Statistics, University of Pittsburgh 2018
Yingyuan Li – Biostatistics, University of Pittsburgh 2019
Li Zhu – Biostatistics, University of Pittsburgh 2019
Chen Gong – Statistics, University of Pittsburgh 2019
Franya Hutchins – Epidemiology, University of Pittsburgh 2020
Rawan Rupnow – Biostatistics, University of Illinois, Chicago 2020
Yue Wang – Biostatistics, University of Illinois, Chicago 2020
Xuetong Zhang – Bioengineering, University of Pittsburgh 2020
Nemin Chen – Epidemiology, University of Pittsburgh 2021
Laura Sammuelsson - Psychology, University of Pittsburgh 2022
Sharon Toth – Anthropology, University of Pittsburgh 2022
Yuna Kim – Biostatistics, Drexel University 2023
Pei-Shan Yen – Biostatistics, University of Illinois as Chicago 2024
Guangming Yang – Biostatistics, Emory University 2025
Kara Suvada - Epidemiology, Emory University 2026

Masters Committee Member:
Past:

Matthew Loiacono – Biostatistics, University of Pittsburgh	2018
Joya Peterson – Genetic Counseling, University of Pittsburgh	2018
Shen Liu – Biostatistics, University of Pittsburgh	2018
Kexin Guo – Biostatistics, University of Pittsburgh	2018
Tian He – Biostatistics, University of Pittsburgh	2018
Jocelyn Mineo - Biostatistics, University of Pittsburgh	2019
Kristina Boyd – Biostatistics, University of Pittsburgh	2019
Xinying Liu – Epidemiology, University of Pittsburgh	2019

Academic Advisor:

Kendra Bobby - Biostatistics, University of Pittsburgh	2016-2019
Liwen Wu – Biostatistics, University of Pittsburgh	2017-2018

Graduate Internship or Research Supervisor:

Zhigang Yao (Pitt Statistics)	2008
Linghui Lu (Temple Statistics)	2014
Yujuan Cai (Temple Statistics)	2014–2015
Du Ye (Temple Statistics)	2014–2015
Jianyun Zhu (Temple Statistics)	2014–2015

Undergraduate Honors Thesis Committee Member:

Julia Gong – Psychology, University of Pittsburgh	2017-2018
Emerald Yuan – Psychology, Emory University	2022-2023

High School Mentoring:

Scott Sobel – Junior, Taylor Allderdice High School	2018-2019
Audrey Leong – Senior, Taylor Allderdice High School	2019-2020

Junior Researcher Mentorship:

Post-Doc Primary Advisor:

Jamshid Namdari – Biostatistics and Bioinformatics, Emory University	2023-Present
Andrew Gerlach – Psychiatry, University of Pittsburgh	2020-2023

Post-Doc Statistical Mentor:

Christopher Kline – Psychiatry, University of Pittsburgh	2010-2013
Leah Irish – Psychiatry, University of Pittsburgh	2011-2013
Ryan Brindle – Psychiatry, University of Pittsburgh	2015-2018
Stephen Smagula – Psychiatry, University of Pittsburgh	2018-2017
H. Matthew Lehrer – Psychiatry, University of Pittsburgh	2019-2022

K-Award Co-Primary Mentor:

Helmet Karim - Psychiatry, University of Pittsburgh	2021-present
Andrew Gerlach – Psychiatry, University of Pittsburgh	2023-Present

K- and F-Award Mentoring Team Member:

Stephen Smagula – Psychiatry, University of Pittsburgh	2017-2022
Maria Pacella – Emergency Medicine, University of Pittsburgh	2019-2022
Swathi Gujral – Psychiatry, University of Pittsburgh	2021-present
Irene Tung – Psychiatry, University of Pittsburgh	2021-present

Ida Fonkoune – Rehabilitation Medicine, University of Minnesota 2021-present
Sarah Brown – Psychiatry, University of Pittsburgh 2021-present

Junior Faculty Mentor
Lu Tang – Biostatistics, University of Pittsburgh 2018-2020

Professional Service:

Emory University:
Faculty Advisory Board, Office of Research Administration 2025-2028
Co-Chair: RSPH Educational Taskforce 2025
Chair: RSPH Finance Committee 2024 - present
Woodruff Health Science Center Research Advisory Council 2022 - present
Chair: BSHES Chair Search 2021
Member: AI.Humanity Advisory Group 2021-2025

University of Pittsburgh:
PhD Admissions Committee 2019-2020
Co-Chair: Statistics in Psychiatry Search Committee 2019-2020
Aesthetics & Decor Committee 2018-2019
Internal Collaboration Committee 2018-2020
MS Admissions Committee 2018-2019
Biostatistics PhD Award Committee 2018-2020
Co-Chair: MPH Biostatistics Committee 2017-2018
Section Chair: Epidemiology Preliminary Committee 2017-2020
Chair Search Committee 2016-2017
Chair: Biostatistics Curriculum Committee 2015–2020
Biostatistics Facilities Committee 2015–2017
Health Care Policy Qualifying Exam 2012
Statistics Hiring Committee 2011
Mathematics Time Series Qualifying Exam 2009
Statistics Graduate Admission Committee 2009–2012
Statistics Qualifying Exam Committee 2008–2012
Statistics Seminar Coordinator 2008–2010

Temple University:
Member, Fox Research Advisory Board 2013–2015
Chair, Graduate Affairs Committee, Department of Statistics 2013–2015
Coordinator, Statistics GenEd, STAT0827 2013–2015
Member, Fox School Vison & Mission Committee 2013–2014

Statistics and Scientific Communities:
External Reviewer – Department of Biostatistics, City University of Hong Kong 2026 - present
External Advisory Committee – ClinTrUSC 2025 - present
Associate Editor – *Journal of the American Statistical Association* 2024 - present
Board of Trustees (COPSS Rep) – National Institute of Statistical Sciences (NISS) 2023 - 2025
Standing Member – NIH Study Section, ASPA 2023 - 2026
External Reviewer, Department of Biostatistics, Virginia Commonwealth University 2023
Guest Editor, Special Issue Complex Time Series, Statistics and Its Interface 2023

Mentor, IMS New Researchers Workshop	2022
Associate Editor, *The American Statistician*	2020 - 2026
Ad Hoc Member – NIH SEP, Chronic Disease & Epidemiology	2020
Ad Hoc Member – NIH Study Section, BMRD	2018-2022
Reviewer – ENAR Student Paper Competition	2018-2020
Member – NIH Special Emphasis Panel, Methods & Measurements	2018 (2 times)
Lead & Organizing Judge, Intel International Science & Engineering Fair (ISEF)	2018
Reviewer – NSF Methodology, Measurement and Statistics	2018
Editorial Board – *Sleep*	2017 – present
Organizer – ASA Conference on Statistical Methods in Imaging	2017
Member – NIH Special Emphasis Panel, BBBP	2017
Special Awards Judge - Intel International Science & Engineering Fair (ISEF)	2017
Associate Editor – *Statistics and Its Interface* (SII)	2016 - 2024
Member – SLDM section of the ASA Award Panel	2015
Member – Joint NSF/NIGMS Panel in Mathematical Biology	2014
Organizer - ENAR session on High Dimensional Biomedical Time Series	2014
President-Elect - American Statistical Association, Pittsburgh Chapter	2012-2013
Regional Advisory Board Member – ENAR	2010-2012
Organizer – ENAR session on Spectral Analysis in Biomedical Studies	2010
External Advisory Board Member – NCI Training Program, UPenn	2008-2013
Data Safety Monitoring Board (DSMB) Member:	
PPower (PI: Sperry)	2018-2021
Stochastic Vibro-Tactile Stimulation (PI: Salsbury)	2017-2021
PAMPer (PI: Sperry)	2017-2018
Multilevel Models of Therapeutic Response in the Lungs (PI: Corcoran)	2016-2020
4-drug Nerve Block vs. Pain Local Anesthetic (PI: Williams)	2016-2020

Referee for: *Annals of Applied Statistics, Annals of Statistics, Biometrika, Communications in Statistics, Journal of the American Geriatrics Society, Journal of the American Statistical Association, Biometrics, IEEE Transactions on Biomedical Engineering, Electronics Journal of Statistics, Journal of Classification, Journal of Clinical Oncology, Journal of the Royal Statistical Society Series B, Journal of Time Series Analysis, Journal of Computational and Graphical Statistics, Neuroimage, Science, Statistics and its Interface, Statistics in Biosciences*

Teaching Experience:

Graduate Courses at Emory University:
Biostatistical Methods – BIOS 508
Statistical Practice I – BIOS 580

Graduate Courses at the University of Pittsburgh:
Bayesian Data Science – BIOS 2063
Introduction to Statistical Methods II – BIOS 2042
Introduction to Statistical Theory I – BIOS 2043
Special Studies – BIOST 2021
Applied Statistical Methods I - STAT 2131
Applied Statistical Methods II - STAT 2132
Applied Advanced Time Series - STAT 2321
Advances in Applied Statistics: Functional Data Analysis - STAT 2391/2
Independent Study – STAT 2991

Graduate Courses at Temple University:
Independent Study – STAT 5182
Directed Study – STAT 9183

Undergraduate Courses at the University of Pittsburgh:
Basic Applied Statistics - STAT 200

Undergraduate Courses at Temple University:
Statistical Reasoning and Games of Chance - STAT 0827