Weiliang Cen

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Biostatistician at USF's SDDA Team with experience in clinical trials, statistical consulting, and publication support. Proficient in study design, advanced analysis (R, SAS, Python, SQL, Mplus, SPSS), and data visualization.

Education

University of South Florida |PhD in Biostatistics	(Expected) Aug 2025
University of South Florida	MPH in Biostatistics	Dec 2017

Skills

Languages/tools: R, SAS, STATA, Python, MPLUS, SQL, SPSS, Shell Scripting, Linux, Unix, Qualtrics, REDCap, Excel.
Analysis: Clinical trial, Survival analysis, Regression Analysis, Longitudinal analysis, Mixed Model, SEM/IRT, Bayesian analysis, Generalized linear mixed models (GLMM), Power and Sample Size estimation**.**
Publications: 5 peer-reviewed publications, 2 manuscripts under review, 25 citations Google Scholar.

Experience

Biostatistician | SDDA Team, University of South Florida   Jan 2021 – Present
- Collaborated with faculty and physicians on statistical analysis plans (SAPs), protocol development, study design, sample size estimation and randomization.
- Utilized R and SAS to clean, manage, and analyze large clinical datasets (Qualtrics and REDCap).
- Created publication-ready tables, figures and visualizations for peer-reviewed manuscripts.
- Led data analysis and manuscript preparation for clinical studies on post-stroke PTSD and dementia with physicians (Tampa General Hospital), both published in peer-reviewed journals.
- Lead Biostatistician for NIH R01 clinical trial (R01CA243800): database management, data analysis, randomization of participants and regulatory reporting (CONSORT diagram, DSMB reports), currently on-going.

Instructor |College of Public Health, University of South Florida   Jan 2020 – Present
- Taught over 500+ students: Introduction to Epidemiology and Introduction to Biostatistics.

Statistical Data Analyst | CFS, University of South Florida   Jan 2018 – Dec 2019
- Wrote SAS macros automating query for data management such as cleaning, merging and analyses.
- Maintained multi-clinical trial databases across states and created guidelines for data dictionaries.
- Optimized script for data retrieval from large multi-clinical databases by reducing fetch time from 30 to 1 minute.
- Automated complex latent models using shell scripts on Linux research clusters for long-running analyses, contributing to a publication in the high-impact Journal of Educational Psychology.

Publications (Selected)

- **Cen, W.**, Sahay, S.S., & Chen, H. (2025). 57.9% of NIH-funded completed clinical trials do not report results. *The Lancet Regional Health - Americas*. (In Review).
- Lu, Y., **Cen, W.**, Wang, W., Huang, Y., & Chen, H. (2023). How big is a big hazard ratio in clinical trials. *International Journal of Clinical Trials,* 10, 195–200.
- Anthony, J., Chen, I., Williams, J., **Cen, W.**, & Erazo, N. (2021). US children's understanding of the English alphabet: Its acquisition, conceptualization, and measurement. *Journal of Educational Psychology*, 113(6), 1073.
- Renati, S., Raju, S.,..., **Cen, W**., Rose, D.Z., & Burgin, S. (2023). Impact of Post-Stroke Post-Traumatic Stress Disorder. *The Neurohospitalist*, 11 (3).

Certification/Awards

- SAS Certified Advanced Programmer for SAS 9.