Vahan Aslanyan

Los Angeles, CA — aslanyan.va@gmail.com — (818) 726—0217

OBJECTIVE	Experienced Biostatistics PhD student with a strong background in designing and implementing statistical methodologies for clinical and observational research studies. Seeking to contribute my expertise in biostatistics, data analysis, and project leadership to a dynamic internship program.

EDUCATION

University of Southern California, Los Angeles, CA
PhD, Biostatistics, August 2020—December 2024 (expected)
Dissertation Topic: Adaptive Randomization in Randomized Controlled Trials with Applications in Alzheimer's Disease
University of California, Berkeley, Berkeley, CA
BA, Applied Mathematics & Statistics, August 2014—May 2018

EXPERIENCE

Research Assistant — Keck School of Medicine of USC
August 2020—Current — Los Angeles, CA

- Lead research design and analytical strategies for observational studies and trials.
- Collaborate with cross-functional teams, including clinicians, academics, data managers, and regulatory affairs, to develop study protocols and statistical analysis plans.
- Perform statistical analyses using SAS, R, STATA, and Python, and provide in-depth interpretation of results for both technical and non-technical audiences.
- Develop statistical methodologies for exploratory studies to accelerate intervention discovery.

Project Assistant — LONI, Keck School of Medicine of USC
June 2018—August 2020 — Los Angeles, CA

- Aggregated, maintained, and harmonized data from multisite aging neurobiology cohort studies.
- Implemented pipelines for brain image segmentation and cut processing time by 40%.
- Developed tools and dashboards for efficient exploratory analysis of cohorts, resulting in 2 predoctoral publications.

SKILLS

Data Analysis & Management: R, STAN, SAS, STATA, Python, SQL, Julia.
Statistical methodology: Clinical trial design, randomization methodologies, survival analysis, longitudinal modeling, causal inference, Bayesian inference.
Machine Learning: Deep learning, Predictive modelling.
Neuroimaging: Freesurfer, SPM, CAT12, AFNI.
Miscellaneous: Git and GitHub, Bash, MATLAB, Adobe Illustrator.

ONGOING CLINICAL PROJECTS

Exercise in Adults With Mild Memory Problems (EXERT) [Phase III]:

- Validate study findings and performed ad hoc analyses for exploratory objectives.
- Conduct post hoc analyses to contextualize study findings.
- Develop a brain imaging pipeline for segmentation and outcome validation.
- Generate Tables, Listings, and Figures (TLFs) for publications.

Safety, Tolerability, PK and PD of Posiphen in Subjects With Early Alzheimer's Disease (DISCOVER) [Phase Ib]:

- Validate primary findings, conduct post-hoc analyses.
- Create TLFs for inclusion in primary publication.
- Implement stable isotop labeling kinetics algorithms to evaluate protein production rates

Lifestyle Enriching Activities for Research in Neuroscience, intervention trial (LEARN-it) [Exploratory]:

- Develop pipelines for data extraction, processing, and integration from cognitive batteries.
- Design statistical analysis plans for comparing two interventions across various outcomes.
- Produce regulatory reporting documents and TLFs for publications.

LATEST PUBLICATIONS

Aslanyan V, Ortega N, Fenton L, et al. *Protective effects of sleep duration and physical activity on cognitive performance are influenced by -amyloid and brain volume but not tau burden among cognitively unimpaired older adults.* NeuroImage: Clinical. 2023

Aslanyan V, Pa J, Hodis HN, et al. *Generalizability of cognitive results from clinical trial participants to an older adult population: Addressing external validity.* Alzheimer's Dement. 2023; 15:e12417

REFERENCES

Wendy J. Mack, PhD, Director of BERD Core at SC CTSI.
Judy Pa, PhD, Co-director of ADCS at UC San Diego.