

PERSONAL INFORMATION:

- **Shea J. Andrews, Ph.D.**
- **Contact Information**
Department of Psychiatry and Behavioral Sciences,
University of California, San Francisco, 675 18th St, San Francisco, CA 94107
shea.andrews@ucsf.edu; +1 925-388-6226; <https://andrewslab.ucsf.edu/>
- **Birthplace:** Melbourne, Victoria
- **Citizenship:** Australian **US Immigration Status:** Permanent Resident

EXECUTIVE SUMMARY:

- **Training:** Interdisciplinary training in genetics, epidemiology, and neurodegenerative disorders.
- **Research:** My research program investigates how genetic, environmental, and social drivers of health jointly influence the risk and progression of Alzheimer's disease (AD), with the goal of developing predictive models to support personalized approaches to dementia prevention. A central focus of my work is understanding why AD disproportionately affects underrepresented populations and how racial and ethnic differences in health exposures influence disease outcomes. I bring more than a decade of experience applying genetic epidemiology to large, deeply phenotyped cohorts to identify causal pathways linking genetic and environmental factors to AD. My program integrates longitudinal cohort data within epidemiologic frameworks to determine how modifiable exposures affect clinical trajectories, biomarker profiles, and cognitive decline. In parallel, I leverage statistical genetics methods—including genome-wide association studies, genetic correlation, polygenic risk scoring, and Mendelian randomization—to quantify genetic contributions to AD risk and evaluate how these effects vary across environmental contexts.
- **Publications:** 71 publications; 6,100+ citations; H-index 33 (Google Scholar), including in high-impact journals such as *Nature*, *Lancet Neurology*, *JAMA Neurology*, and *Alzheimer's & Dementia*.
- **Mentoring:** Active mentor to graduate students, postdoctoral fellows, and trainees, and supporting scholars from underrepresented backgrounds in dementia research.
- **Funding:** PI on K99/R00; PI on 4 foundation and pilot grants.
- **Awards:** UCSF Alzheimer's Disease Research Center Research Education Component Scholar; NACC New Investigator Award; Freidman Brain Institute Exceptional Achievement Postdoc Award
- **Outreach:** 15 invited talks at international/national conferences and institutions.
- **Service:** Peer review for academic journals and international granting agencies.

ACADEMIC APPOINTMENTS:

07/2022 – present	Assistant Professor Department of Psychiatry and Behavioral Sciences University of California San Francisco, San Francisco, CA
09/2021 – 06/2022	Instructor Ronald M. Loeb Center for Alzheimer's Disease Icahn School of Medicine at Mount Sinai, New York, NY

EDUCATION:

02/2013 – 05/2017	Ph.D., Medical Sciences, The Australian National University, ACT, Australia Advisors: Dr. Simon Easteal, Dr. Kaarin Anstey, Dr. Debjani Das Thesis: <i>Predicting cognitive decline: Genetic, environmental and lifestyle risk factors.</i>
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- 02/2007 – 07/2012 BS, Major in Genetics with Honours Class I in Biochemistry
University of Queensland, QLD, Australia
Thesis: *Characterization of peptides encoded by upstream open reading frames*
Advisor: Dr. Joe Rothnagel
- 02/2007 – 12/2010 BA, dual Major in Journalism and Mass Communication, and Political Science
University of Queensland, QLD, Australia

TRAINING:

- 01/2018 – 09/2021 Postdoctoral research fellow
Ronald M. Loeb Center for Alzheimer's Disease
Icahn School of Medicine at Mount Sinai, New York, NY
Advisor: Dr. Alison Goate
- 07/2016 – 12/2017 Postdoctoral research fellow
Centre for Research on Ageing, Health and Wellbeing,
Australian National University, Canberra, Australia
Advisor: Dr. Kaarin Anstey

HONORS & AWARDS:

- 2023 New Vision Research Travel Award
- 2023 UCSF Alzheimer's Disease Research Center Research Education Component Scholar Program
- 2021 Freidman Brain Institute Exceptional Achievement Postdoc Award.
- 2019 Charleston Conference on Alzheimer's Disease.
- 2017 ARC Centre of Excellence in Population Aging Research (CEPAR) Early Career Research Fellow Travel Scheme.
- 2017 Australian National University Early Career Research Travel Grants.
- 2017 Advanced Psychometrics Methods in Cognitive Aging Research 2017 Travel Fellowship.
- 2015 Vice-Chancellor's HDR Travel Grants.
- 2012 University of Queensland Biochemistry Alumni Prize.

FELLOWSHIP AND GRANT SUPPORT:

ACTIVE RESEARCH FUNDING:

- UCSF Resource Allocation Program** PI 04/2026 – 02/2028
Alzheimer Disease Research Center (ADRC) Developmental Projects
Validation and Co-design of a Genomic-Exposome Dementia Risk Assessment
 This project will evaluate the clinical utility of integrated genetic and exosome risk reports for dementia and co-develop patient facing report templates with community and clinical stakeholders.
- Marcus Program** MPI 01/2026 – 01/2027
Inclusion, Diversity, Equity, and Anti-Discrimination in Precision Medicine (IDEA)
Advancing Equity in Precision Brain Health via a Novel Gene-Environment Sleep Deviation Framework
 This project will evaluate how mismatches between genetically predicted and observed sleep patterns, or gene-environment deviations, may represent an overlooked mechanism contributing to disparities in AD/ADRD risk.
- UCSF (AVC-ROI)** PI 08/2025 – 07/2026
Research Resiliency Initiative Mini-Grant
 This funding was awarded by the Associate Vice Chancellor for Research Opportunity and Impact to assist researchers affected by federal policy changes in obtaining new funding.

- **UCSF DPBS** PI 01/2026 – 05/2028
DPBS Pivot/Resilience Funding Program
 This funding was awarded by the UCSF Department of Psychiatry and Behavioral Sciences to assist researchers to realign their research focus and pursue new opportunities in the evolving funding landscape.

PAST RESEARCH FUNDING:

- **Pilot Grant** PI 06/2023 – 05/2025
NACC New Investigator Award
Evaluating clinical and polygenic risk scores for AD in diverse populations
 This project will evaluate the association and predictive ability of clinical and polygenic risk scores and their synergistic effect on cognitive function across diverse populations
- **ABA-22-969581** PI 11/2022 – 10/2025
Alzheimer's Association
Ancestry-specific effects of APOE on AD endophenotypes and risk factors
 The objective of this project is to systematically evaluate the effect of APOE on AD endophenotypes in a diverse cohort and identify risk factors that mediate the observed ancestry differences of APOE on AD risk.
- **NIA K99/R00AG070109A** PI 02/2021 – 11/2025
NIH-NIA
Elucidating the causal associations underlying Alzheimer's disease.
 This research program's objective is to enhance our understanding of the causal relationships underlying Alzheimer's disease in women and diverse populations by using polygenic risk scoring and Mendelian randomization to identify novel risk factors for Alzheimer's disease.
- **IGPCC-B-1258281** PI 02/2024 – 01/2025
Alzheimer's Association
AAIC Neuroscience Next - UCSF Hub
 This funding supported the UCSF Hub for the AAIC Neuroscience Next, a global, no-cost conference dedicated to supporting and showcasing the next generation of Alzheimer's and dementia researchers and clinicians.

FELLOWSHIP:

- **AARF-20-675804** Postdoctoral Fellowship 06/2020 – 10/2023
Alzheimer's Association
Assessing the causal role of mitochondria in Alzheimer's disease.
 This project used epidemiology, Mendelian randomization, and polygenic risk scores to establish a causal role of mitochondrial DNA abundance in Alzheimer's disease.
- **Australian Postgraduate Award** PhD Scholarship 02/2013 – 03/2017
Australian Department of Industry, Innovation, Science, Research and Tertiary Education

PUBLICATIONS:

PEER-REVIEWED RESEARCH PUBLICATIONS (PRIMARY RESEARCH):

2026

1. Chatterjee A, Alveraz B, Sharma RU, Jonson C, Wilkins HM, Pa J, Swerdlow RH, Goate A, Yaffe K, **Andrews SJ**, for ADGC and ADNI. *Evaluating the causal effect of mitochondrial dysfunction on*

Alzheimer's and Parkinson's disease using Polygenic Risk Scores and Mendelian Randomization. Alzheimer's Dement. 22, e71469 (2026).

2. Okorie M, Jonson C, Oddi AP, Castruita PA, Fulton-Howard B, Yaffe K, Yokoyama JS, Udeh-Momoh C, **Andrews SJ**. *Cross-Ancestry Polygenic Risk Scores Enhance Alzheimer's Disease Risk Prediction in Multiethnic Cohorts.* Alzheimer's Dement. 22, e71529 (2026).
3. Cherbuin N, Camargo Tavares L, Fraser MA, Li Y, Navarro C, Walsh EI, **Andrews SJ**, Burns RA, Brüstle A, Rasmussen LJ. *Interactions between rare variants in DNA repair genes and cardiometabolic risk explain more variability in cognitive function.* GeroScience 1–19 (2026) doi:10.1007/s11357-026-02238-3.
4. Mendoza-Villena EP, Neelamegam M, Phillips N, Johnson L, Abdullah L, Hall J, O'Bryant S, Mun E-Y, **Andrews SJ**, Barber R, Pathak GA, Housini M, Zhang K, Zhou Z. *Alcohol use and APOE ϵ 4 interaction with cognitive domains among American adults from diverse racial/ethnic groups: A HABS-HD study.* Alzheimer's Dement.: Behav. Socioecon. Aging 2, (2026).
5. Okorie M, Jiang X, Yaffe K, Yokoyama JS, & **Andrews SJ**. *Associations of dementia polyexposure scores to Alzheimer's disease endophenotypes in diverse populations.* Alzheimer's Dement. 22, e71567 (2026).

2025

6. Lammi V, Nakanish T, Jones S, **Andrews SJ** et al. *Genome-wide Association Study of Long COVID.* Nat. Genet. 1–16 (2025).
7. Phillips JM, Dumitrescu LC, Archer DB, Regelson AN, Mukherjee S, Lee ML, Choi SE, Scollard P, Trittschuh EH, Kukull WA, Biber S, Mez J, Mahoney ER, Clifton M, Libby JB, Walters S, Bush WS, Engelman CD, Lu Q, Fardo DW, Widaman KF, Buckley RF, Mormino EC, Sanders RE, Clark LR, Gifford KA, Vardarajan B, Cuccaro ML, Pericak-Vance MA, Farrer LA, Wang LS, Schellenberg GD, Haines JL, Jefferson AL, Johnson SC, Albert MS, Keene CD, Saykin AJ, Risacher SL, Larson EB, Sperling RA, Mayeux R, Goate AM, Renton AE, Marcora E, Fulton-Howard B, Patel T, Bennett DA, Schneider JA, Barnes LL, Cruchaga C, Hassenstab J, Belloy ME, **Andrews SJ** et al. *Novel modelling approaches to elucidate the genetic architecture of resilience to Alzheimer's disease.* Brain. awaf106 (2025).
8. Housini M, Zhou Z, Abdullah L, Pathak G, Ayoub R, Gutierrez J, **Andrews SJ**, Phillips N, O'Bryant S, Barber R, For the HABS-HD Study Team. *Alzheimer's disease genetic risk: Top African American risk allele frequencies and genetic architecture among Mexican-, African-, and non-Hispanic White Americans.* Alzheimer's Dement: Transl. Res. Clin. Interv. 11, (2025).
9. Gaynor LS, Lopez FV, Van Hulle CA, Li C, Vasunilashorn SM, **Andrews SJ**, Simone S, Mungas DM. *Measurement equivalence of the UDS version 2.0 and 3.0 neuropsychological batteries.* Alzheimer's Dement. 21, e70720 (2025).
10. Yu NYD, **Andrews SJ**, Hou L, Fornage M, Yaffe K. *Mitochondrial Haplogroups, but not Heteroplasmy, are Associated with Midlife Cognitive Function.* Alzheimer's Dement. 21, e70839. (2025)
11. Chatterjee A, Cavaillès C, Davies NM, Yaffe K & **Andrews SJ**. *Disentangling the causal effects of education and participation bias on Alzheimer's disease using Mendelian Randomization.* Neurol. Genet. 11, (2025).
12. **Andrews SJ**, Tolosa-Tort P, Jonson C, Fulton-Howard B, Renton AE, Yokoyama JS, Yaffe K for ADNI. *The Role of Genomic-Informed Risk Assessments in Predicting Dementia Outcomes.* Alzheimer's Dement. Alzheimer's Dement. 21, e70826 (2025).
13. Menta BW, Schueddig E, Ranjan A, Li Y, **Andrews SJ**, Wilkins HM, Pei D, Swerdlow RH. *MtDNA-depleted neuronal cell transcriptomes reveal Alzheimer's disease-related changes.* Alzheimer's Dement. 21, (2025).

2024

14. Ferguson EL, Buto P, Thoma M, Wang J, Glymour MM, Hoffmann TJ, Choquet H, **Andrews SJ**, Yaffe K, Casaletto KB, Brenowitz WD. *Relationships of visual impairment and eye conditions with imaging markers, cognition, and diagnoses of dementia: a bi-directional Mendelian randomization study.* JAMA Network Open. (2024). 7, e2424539.

15. Gao Y, **Andrews SJ**, Yaffe K, Leng Y. *Snoring and risk of dementia: a prospective cohort and Mendelian randomization study*. Sleep. (2024). zsae149.
16. Cavaillès C, **Andrews SJ**, Leng Y, Chatterjee A, Daghlas I, Yaffe K. *Causal Associations of Sleep Apnea with Alzheimer's Disease and Cardiovascular Disease: a Bidirectional Mendelian Randomization Analysis*. JAHA. (2024). 13, e033850.
17. Duggan MR, Peng Z, Sipilä PN, Lindbohm JV, Chen J, Lu Y, Davatzikos C, Erus G, Hohman TJ, **Andrews SJ**, Candia J, Tanaka T, Joynes CM, Alvarado CX, Nalls, M.A., Cordon J, Daya GN, An Y, Lewis A, Moghekar A, Palta P, Coresh J, Ferrucci L, Kivimäki M, Walker KA. *Proteomics identifies potential immunological drivers of post-infection brain atrophy and cognitive decline*. Nature Aging. (2024). 4, 1263–1278.
18. **Andrews SJ**, Boeriu AI, Belloy ME, Renton AE, Fulton-Howard B, Willa BD, Yaffe K, for ADNI. *Dementia risk scores, APOE and risk of Alzheimer disease: one size does not fit all*. Alzheimer's & Dementia (2024). doi:10.1002/alz.14300.

2023

19. Harerimana NV, Paliwal D, Romero Molina C, Bennet D, Pa J, Goate A, Swerdlow RH, **Andrews SJ**. (2023) *The Role of Mitochondrial genome abundance in Alzheimer's Disease*. Alzheimer's & Dementia. 5(19):2069-2083
20. Cochran NJ, Acosta-Uribe J, Esposito BT, Madrigal L, Aguillon D, Giraldo MM, Taylor JW, Bradley J, Fulton-Howard B, **Andrews SJ** et al. *Genetic Associations with Age at Dementia Onset in the PSEN1 E280A Colombian Kindred*. Alzheimer's & Dementia. 9(19) 3835-3847 (2023).
21. Wainberg M, **Andrews SJ**, & Tripathy, S. J. (2023). *Shared genetic risk loci between Alzheimer's disease and related dementias, Parkinson's disease, and amyotrophic lateral sclerosis*. Alzheimer's Res. Ther. 15, 113.
22. Kanai M, **Andrews SJ**, et al. *A second update on mapping the human genetic architecture of COVID-19*. Nature 621, E7–E26 (2023).
23. Shvetcov A, Thomson S, Spathos J, Cho A, Wilkins HM, **Andrews SJ**, et al. *Blood-Based Transcriptomic Biomarkers Are Predictive of Neurodegeneration Rather Than Alzheimer's Disease*. Int. J. Mol. Sci. 24, 15011 (2023).
24. Belloy ME, **Andrews SJ**, Guen YL, Cuccaro M, Farrer LA, Napolioni V, Grecius MD. *APOE Genotype and Alzheimer Disease Risk Across Age, Sex, and Population Ancestry*. JAMA Neurol. 80, (2023).

2022

25. Horguslouoglu-Moloch E, Neff R, Song W, ... **Andrews SJ**... et al. *Integrative Metabolomics-Genomics Approach Reveals Key Metabolic Pathways and Regulators of Alzheimer's Disease*. Alzheimer's & Dementia. 18, 1260–1278 (2022).
26. Pathak GA, Karjalainen J, Stevens C, Neal BM, Daly M, Ganna A, **Andrews SJ**, Nanai M, et al. *A first update on mapping the human genetic architecture of COVID-19*. Nature 608, E1–E10 (2022).
27. Watts A, Charlise P, Hu J, Hui D, Pa J, **Andrews SJ**, Michaelis EK, Swerdlow RH. *A Mitochondrial DNA Haplogroup Defines Patterns of Five-Year Cognitive Change*. J. Alzheimer's Dis. 89, 913–922 (2022).
28. Farrell K, Kim S, Han N, Iida MA, Gonzalez EM, Otero-Garcia M, Walker JM, Richardson TE, Renton AE, **Andrews SJ**. et al. *Genome-wide association study and functional validation implicates JADE1 in tauopathy*. Acta neuropathologica. 143(1):33-53. (2022).
29. Eissman JM, Dumitrescu L, Mahoney ER, Smith AN, Mukherjee S, Lee ML, Scollard P, Choi SE, Bush WS, Engelman CD, Lu Q, Fardo DW, Trittschuh EH, Mez J, Kaczorowski CC, Saucedo HH, Widaman KF, Buckley RF, Properzi MJ, Mormino EC, Yang HS, Harrison TM, Hedden T, Nho K, **Andrews SJ**. et al. *Sex differences in the genetic architecture of cognitive resilience to Alzheimer's disease*. Brain 145, awac177- (2022).

2021

30. **Andrews SJ**, Fulton-Howard B, O'Reilly P, Marcora E, Goate A. (2021). *Causal Associations Between Modifiable Risk Factors and the Alzheimer's Phenome*. Annals of Neurology 89:54–65.

31. Lyon, M. S, **Andrews SJ**, Elsworth B, Gaunt TR, Hemani G, Marcora E. (2021). *The variant call format provides efficient and robust storage of GWAS summary statistics*. Genome Biology. 22(32).
32. McInerney WT, Fulton-Howard B, Patterson C, Paliwal D, Jermini LS, Patel HR, Swerdlow RH, Pa J, Goate A, Eastal S, **Andrews SJ**. (2021). *A globally diverse reference alignment and panel for imputation of mitochondrial DNA variants*. BMC Bioinformatics. 22(417).
33. Niemi, MEK, Karjalainen J, Liao RG, Neale BM, Daly M, Ganna A, Pathak GA, **Andrews SJ**, Kanai M, et al. (2021). *Mapping the human genetic architecture of COVID-19 by worldwide meta-analysis*. Nature. 600:472–477.
34. Paliwal D, McInerney WT, Pa J, Swerdlow RH, Eastal S, **Andrews SJ**. (2021). *Mitochondrial pathway polygenic risk scores are associated with Alzheimer's Disease*. Neurobiology of Aging. 108:213-222.

2020

35. Peters R, Yasar S, Anderson C, **Andrews SJ**, et al. (2020). *An investigation of antihypertensive class, dementia and cognitive decline. A meta-analysis*. Neurology. 94(3)
36. **Andrews SJ**, Fulton-Howard B, Patterson C, McFall GP, Gross A, Michaelis EK, Goate A, Swerdlow RH, Pa J, and for the Alzheimer's Disease Neuroimaging Initiative. (2020). *Mitochondrial Interactions Influence Alzheimer's Disease Risk*. Neurobiology of Aging. 87:138.e7-138.e14
37. Burns R, **Andrews SJ**, Cherbuin N, Anstey K. (2020). *Role of apolipoprotein E epsilon 4 (APOE*ε4) as an independent risk factor for incident depression over a 12-year period in cognitively intact adults across the lifespan*. BJPsych Open. 6(3):e47
38. Swerdlow RH, Hui D, Chalise P, Sharma P, Wang X, **Andrews SJ**, Pa J, Mahnken JD, Jill Morris J, Wilkins HM, Burns JM, Michaelis ML, Michaelis EK (2020). *Exploratory analysis of mtDNA haplogroups in two Alzheimer's longitudinal cohorts*. Alzheimer's & Dementia. 16:1164–1172.
39. Logan Dumitrescu... **Andrews SJ**... et al. (2020) *Genetic Variants and Functional Pathways Associated with Resilience to Alzheimer's Disease*. Brain. 143, 2561–2575.
40. Fadista J, Kraven L, Karjalainen J, **Andrews SJ**, Geller F, Baillie JK, Wain LV, Jenkins RG, Feenstra B. (2020). *Shared genetic etiology between idiopathic pulmonary fibrosis and COVID-19 severity*. EBioMedicine 65:103277.

2019

41. **Andrews SJ** & Goate A. (2019). *Mendelian randomization indicates that TNF is not causally associated with Alzheimer's disease*. Neurobiology of Aging. 84:241.e1-241.e3
42. **Andrews SJ**, Goate A & Anstey K. (2019). *Association between alcohol consumption and Alzheimer's disease: A Mendelian Randomization Study*. Alzheimer's & Dementia. 16, 345–353 (2019).
43. **Andrew SJ**, McFall G, Dixon R, Cherbuin N, Eramudugolla R, Anstey K. (2019). *Alzheimer's environmental and genetic risk scores are differentially associated with general cognitive ability and dementia severity*. Alzheimer Disease & Associated Disorders. 33(2):95-103.

2018

44. Watts A, **Andrews SJ**, Anstey KJ. (2018). *Sex Differences in the Impact of BDNF Genotype on the Longitudinal Relationship between Physical Activity and Cognitive Performance*. Gerontology. 64:361–372.
45. **Andrews SJ**, Ismail Z, and Anstey K, Mortby ME. (2018). *Association of Alzheimer's genetic loci with mild behavioral impairment*. American Journal of Medical Genetics Part B Neuropsychiatric Genetics. 177(8):727-735.

2017

46. **Andrews SJ**, Das D, Anstey KJ, Eastal S. (2017). *Association of AKAP6 and MIR2113 with cognitive performance in a population based sample of older adults*. Genes, Brain and Behavior. 16(4): 472-478
47. **Andrews SJ**, Das D, Anstey KJ, Eastal S (2017). *Late Onset Alzheimer's disease risk variants in cognitive decline: The PATH Through Life Study*. Journal of Alzheimer's disease. 57:423-436.

48. **Andrews SJ**, Eramudugolla R, Velez JI, Cherbuin N, Eastaál S, Anstey KJ. (2017). *Validating the role of the Australian National University Alzheimer's Disease Risk Index (ANU-ADRI) and a genetic risk score in progression to cognitive impairment in a population-based cohort of older adults followed for 12 years*. *Alzheimer's Research & Therapy*. 9:1-16
49. McDermott KL, McFall GP, **Andrews SJ**, Anstey KJ, Dixon RA. (2017). *Memory Resilience to Alzheimer's Genetic Risk: Sex Effects in Predictor Profiles*. *J Gerontol B Psychol Sci Soc Sci*.

2016

50. **Andrews SJ**, Das D, Cherbuin N, Anstey KJ, Eastaál S. (2016). *Association of genetic risk factors with cognitive decline: The PATH through life project*. *Neurobiology of Aging*. 41:150-158.
51. Vélez JI, Lopera F, Sepulveda-Falla D, Patel HR, Johar AS, Chuah A, Tobón C, Rivera D, Villegas A, Cai Y, Peng K, Arkell R, Castellanos FX, **Andrews SJ**, et al. (2016). *APOE* E2 allele delays age of onset in PSEN1 E280A Alzheimer's disease*. *Molecular Psychiatry*. 21(7):916-24

2015

52. **Andrews SJ**, Das D, Anstey KJ, Eastaál S. (2015). *Interactive effect of APOE genotype and blood pressure on cognitive decline: The PATH through life project*. *Journal of Alzheimer's Disease*. 44(4): 1087-98.

PEER-REVIEWED RESEARCH PUBLICATIONS (REVIEWS, META-ANALYSES, INVITED PERSPECTIVES):

2026

1. **Andrews SJ** & Yaffe K. *Advancing Precision Dementia Care With Genetic-Exposome Risk Assessment*. *JAMA Neurol*. 83, (2026).
2. Tolosa-Tort P, Okorie M, Chatterjee A, Boeriu AI, Sharma RU, **Andrews SJ**. *Toward Personalized Medicine in AD/ADRD Through Genetic-Exposome Dementia Risk Assessments*. *npj dementia*. In press
3. **Andrews SJ**. *What My Mother's APOE Result Taught Me About Dementia Risk*. *npj dementia*. In press

2025

4. Zsadyani SE, Addison E, Alladi S, **Andrews SJ**, BS K, Carello-Collar G, Dubljević O, Ehrenberg AJ, Farina FR, Grinberg LT, Ibáñez A, Mastersteck A, Nigussie A, Rogalski EJ, Seibert K, Stefanova E, Yaffe K, Zewde YS, Zimmer ER, Fontana IC, Sexton CE. *Democratizing dementia research through global online conferences*. *Nat. Neurosci*. 1–4 (2025).

2023

5. **Andrews SJ**, Renton A, Fulton-Howard B, Podlesney-drabiniok A, Marcora E & Goate AM. (2023). *The complex genetic architecture of Alzheimer's disease: novel insights and future directions*. *eBioMedicine*. 90:104511.

2022

6. Romero-Molina C, Garretti F, **Andrews SJ**, Marcora E & Goate AM. (2022). *Microglial efferocytosis: Diving into the Alzheimer's disease gene pool*. *Neuron* 110, 3513–3533.

2021

7. Novikova G, **Andrews SJ**, Renton A, Marcora E. (2021). *Beyond association: successes and challenges in linking non-coding genetic variation to functional consequences that modulate Alzheimer's disease risk*. *Molecular Neurodegeneration*. 16(27).

2020

8. **Andrews SJ**, Fulton-Howard B, Goate A. (2020). *Interpretation of risk loci from genome-wide association studies of Alzheimer's disease*. *Lancet Neurology*. 19(4):326-335

2019

9. **Andrews SJ**, McFall G, Booth A, Dixon R, Anstey K (2019). *Association of Alzheimer's Disease Genetic Risk Loci with Cognitive Performance and Decline: A Systematic Review*. *Journal of Alzheimer's Disease*. 69(4):1109-1136.

10. **Andrews SJ**, Fulton-Howard B, Goate A. (2019). *Protective Variants in Alzheimer's Disease*. Current Genetic Medicine Reports. 7(1):1-12.
11. Pa J, **Andrews SJ**, Swerdlow R. (2019). *Mitochondria and Alzheimer's: Is PTC1 the Smoking Gun?* Trends in Neurosciences. 11(42):759-762.

2014

12. **Andrews SJ** and Rothnagel J. (2014). *Emerging evidence for functional peptides encoded by short open reading frames*. Nature Reviews Genetics. 15(3): 193-204.

MANUSCRIPTS UNDER REVIEW (PREPRINTS):

1. Mustaq M, Ahmed N, Mahbub S, Li C, Miyaoka Y, TCW J, **Andrews SJ**, Bayzid MS. *Predicting Alzheimer's Trajectory: A Multi-PRS Machine Learning Approach for Early Diagnosis and Progression Forecasting*. (2023). medRxiv doi:10.1101/2023.11.28.23299110.
2. **Andrews SJ**, Sharma RU, Mitchell BA, Tong T, Bonham LW, Renton AE, Zhang X, Sirota M, Tosun D, Yaffe K, for ADNI. *Integrative effects of Telomere Length, Epigenetic Age, and Mitochondrial DNA abundance in Alzheimer's Disease*. medRxiv 2025.07.16.25331683 (2025) doi:10.1101/2025.07.16.25331683.
3. Boeriu AI, Gu T, Fulton-Howard B, Lucero EM, Shortt J, Gignoux C, Rajabli F, Griswold AJ, Yaffe K, **Andrews SJ**. *Ancestry-specific effects of APOE on Alzheimer Disease Endophenotypes*. medRxiv (2026) doi:10.64898/2026.03.23.26349095.
4. Yang C, Cook N, Zeng Y, Sivasankaran SK, FinnGen, DeCasien A, **Andrews SJ**, Belloy ME. *Shared risk genes and causal relationships across sex hormone-related traits and Alzheimer's disease*. medRxiv (2026). doi:10.64898/2026.04.23.26351626.
5. Cook N, Zeng Y, Yang C, Jiang Z, Wang T-C, Le Guen Y, Cody K, Johnson M, Zhang R, Merritt VC, Hauger RL, The VA Million Veteran Program, FinnGen, Koran ME, Mormino EC, Gordon B, DeCasien A, **Andrews SJ**, Dumitrescu L, Archer DB, Hohman TJ, Pottier C, Cruchaga C, Sherva R, Logue M, Napolioni V, Greicius MD, Belloy ME. *An APOE*4-Informed Genomic Atlas of the X Chromosome in Alzheimer's Disease*. medRxiv (2026) doi:10.64898/2026.05.05.26352461.
6. Li MY, Tolosa-Tort P, Heston MB, Insel PS, & **Andrews SJ**. *Multi-domain AD risk burden and plasma biomarkers in cognitively unimpaired adults*. medRxiv (2026) doi:10.64898/2026.06.11.26355499.
7. Boeriu AI, **Andrews SJ**, Hoang T, Bae S, & Yaffe K. *Epigenetic Clock Trajectories and Brain Health in Midlife*. medRxiv (2026) doi:10.64898/2026.07.16.26358251.

PEER-REVIEWED RESEARCH PRESENTATIONS (POSTERS AND TALKS INCLUDING BY *TRAINEES):

1. **Andrews SJ**, Solsberg CW, Renton AE, Fulton-Howard B, Yokoyama JS, Yaffe K. *Evaluating the Impact of Combined Clinical and Genetic Risk Factors on Dementia Onset*. Presented at Alzheimer's Association International Conference, Philadelphia, NJ (July 2024).
2. * Chatterjee A, Sirkis DW, Johnson T, Pham T, Miller BL, Rabinovici GD, Wilkins HM, Yaffe K, Swerdlow RH, Yokoyama JS, **Andrews SJ**. *Developing an optimized protocol to measure mitochondrial phenotypes as a blood-based biomarker for mitochondrial dysfunction in AD*. Presented at Alzheimer's Association International Conference, Philadelphia, NJ (July 2024).
3. * Boeriu AI, Fulton-Howard B, Phillips N, Barber R, O'Bryant SE, Yaffe K, **Andrews SJ**. *Ancestry-specific effects of APOE on AD endophenotypes and modifiable risk factors*. Presented at Alzheimer's Association International Conference, Philadelphia, NJ (July 2024).
4. * Paço SLG, Pereira FL, **Andrews SJ**, Grinberg LT, Naslavsky MS. *Investigating the Relevance of Genetic Variation at Post-Translational Modification Sites in the Polygenic Risk Model for Alzheimer's disease-associated Phenotypes*. Presented at Alzheimer's Association International Conference, Philadelphia, NJ (July 2024).

5. Molina CR, Lysaker CR, Roberts A, Gilmore C, See WY, Liu Y, Pa J, Swerdlow RH, Goate AM, **Andrews SJ**, Wilkins HM. *Mitochondrial DNA depletion induces AD like phenotypes in neuronal and glial cells*. Presented at Alzheimer's Association International Conference, Philadelphia, NJ (July 2024).
6. **Andrews SJ**, Renton AE, Fulton-Howard B, Brenowitz WD, Van Hulle CA, Li C, Yaffe K. *Examining the Interactive Effect of Cardiovascular Risk Factors and APOE Genotype on Population Health Disparities in dementia risk*. *Alzheimer's & Dementia* (2023):19, e071576
7. **Andrews SJ**, Chao MJ, Fulton-Howard B, Pa J, Yaffe K, Goate A. *Sex-specific effects of genetically predicted BMI and education on risk of AD*. *Alzheimer's & Dementia* (2023):19, e079089. Presented at Alzheimer's Association International Conference, Amsterdam, Netherlands (July 2023)
8. Molina CR, See WY, Liu Y, Pa J, Wilkins HM, Swerdlow RH, Goate A, **Andrews SJ**. *Consequences of mitochondrial DNA depletion in microglial cells*. *Alzheimer's & Dementia* (2023):19, e074877. Presented at Alzheimer's Association International Conference, Amsterdam, Netherlands (July 2023)
9. Gao Y, Andrews SJ, Yaffe K, Leng Y. *Causal effects of Alzheimer's Disease on snoring may be driven by Body Mass Index: A bidirectional Mendelian Randomization Study*. *Alzheimer's & Dementia* (2023):19, e074418. Presented at Alzheimer's Association International Conference, Amsterdam, Netherlands (July 2023)
10. * Alvarez BD, Molina CR, Wilkins HM, Pa J, Swerdlow RH, Goate A, **Andrews SJ**. *Protective effects of mitochondrial genome abundance on Alzheimer's Disease: a Mendelian randomization study*. *Alzheimer's & Dementia* (2023):19, e083132. Presented at Alzheimer's Association International Conference, Remote (July 2023)
11. * Taylor JC, Brenowitz WD, Yaffe K, **Andrews SJ**. *Height and intracranial volume as protective factors against Alzheimer's disease: a Mendelian randomization analysis*. *Alzheimer's & Dementia* (2023):19, e080684. Presented at Alzheimer's Association International Conference, Remote (July 2023)
12. Belloy ME, **Andrews SJ**, Guen YL, Napolioni V, Greicius MD. *APOE and Alzheimer disease risk across age, sex, race, ethnicity, and ancestry: An overview from 68,756 individuals*. *Alzheimer's & Dementia* (2023):19, e082772. Presented at Alzheimer's Association International Conference, Amsterdam, Netherlands (July 2023)
13. **Andrews SJ**, Philips N, Barber R, O'Bryant S, Yaffe K. *Ancestry specific effects of APOE on AD endophenotypes and modifiable risk factors*. Presented at AAIC Advancements: APOE, St. Louis MO (March 2023)
14. **Andrews SJ**, The COVID-19 Host Genetics Initiative. *Novel genetic associations underlying symptom severity and infection susceptibility to SARS-CoV-2*. Presented at the American Society of Human Genetics, Los Angeles, California (September 2022).
15. * NV Harerimana, Paliwal D, Romero C, Bennett DA, Pa J, Swerdlow RH, Goate AM, **Andrews SJ**. *Mitochondrial genome abundance is associated with Alzheimer's disease neuropathological burden and cognitive function*. *Alzheimer's & Dementia* (2022):18, e065088. Presented at Alzheimer's Association International Conference, San Diego, California (July 2022)
16. * NV Harerimana, Li C, Zhu CW, Sano M, Grossman H, A Goate, **Andrews SJ**. *Cross-ancestry effect of APOE on cognitive performance*. *Alzheimer's & Dementia* (2022):18, e064651. Presented at Alzheimer's Association International Conference, San Diego, California (July 2022)
17. **Andrews SJ**, Fulton-Howard B, Bennett DA, Goate A. *Integrating genetic correlation, polygenic risk scores, and Mendelian randomization to identify modifiable risk factors for Alzheimer's disease*. *Alzheimer's & Dementia* (2022):18, e065084. Presented at Alzheimer's Association International Conference, San Diego, California (July 2022)
18. **Andrews SJ**. *Alzheimer's disease is causally associated with mitochondrial dysfunction*. *Alzheimer's & Dementia* (2021):17, e057480. Presented at Alzheimer's Association International Conference, Remote (July 2021)

19. **Andrews SJ**, Goate AM. *Mitochondrial DNA copy number is associated with cognitive impairment*. Alzheimer's & Dementia (2020):16, e047543. Presented at Alzheimer's Association International Conference, Remote (July 2020)
20. * Paliwal D, McInerney T, Eastel S, **Andrews SJ**. *Mitochondrial pathway-specific Alzheimer's disease polygenic risk scores are associated with an increased risk of Alzheimer's disease*. Alzheimer's & Dementia (2020):16, e047144. Presented at Alzheimer's Association International Conference, Remote (July 2020)
21. **Andrews SJ**, Marcora E, Goate AM. Causal relationship between modifiable risk factors and the Alzheimer's phenotype. Presented at the Mendelian Randomization Conference, Bristol, UK. (July 2019)
22. **Andrews SJ**, Swerdlow RH, McInerney T, Fulton-Howard B, Gross AL, McFall GP, Patterson C, Goate AM, Michaelis EK, Pa J. *Mitochondrial haplogroups and a nuclear encoded mitochondrial polygenic risk score interact to influence dementia risk*. Alzheimer's & Dementia (2018):14 (7S Part 29), P1538-P1538. Presented at Alzheimer's Association International Conference, Chicago, Illinois (July 2018).
23. **Andrews SJ**, Mortby ME, Ismail Z, Anstey KJ. Alzheimer's genetic risk score linked to mild behavioral impairment. Alzheimer's & Dementia (2017):13 (7S Part 6), P296-P296. Presented at Alzheimer's Association International Conference, London, UK (July 2017)
24. **Andrews SJ**, Das D, Anstey KJ, Eastel S. *Late Onset Alzheimer's disease risk variants in cognitive decline: The PATH Through Life Study*. Presented at the Cognitive Aging Conference, Atlanta, GA (April 2016)
25. **Andrews SJ**, Das D, Anstey KJ, Eastel S. *Association of Alzheimer's genetic risk factors with cognitive decline: The path through life project*. Alzheimer's & Dementia (2015):11 (7S Part 7), P343-P343. Presented at Alzheimer's Association International Conference, Washington, DC (July 2015)
26. **Andrews SJ**, Das D, Anstey KJ, Eastel S. *No interaction between APOE and late-life hypertension in predicting cognitive decline*. Presented at the Genetics Society of Australasia, Sydney, Australia (July 2014)

BOOK CHAPTERS:

- Renton AE, Fulton-Howard B, **Andrews SJ**, Marcora E. & Goate AM. Charney and Nestler's Neurobiology of Mental Illness - Genetics of Alzheimer's Disease, Parkinson's Disease, and Lewy Body Dementia. 723–736 (2025).

DOCTORAL THESIS:

- **Andrews SJ**. *Predicting cognitive decline: Genetic, environmental and lifestyle risk factors*. 2017. PhD Dissertation, Australian National University, Australia.

HONOURS THESIS:

- **Andrews SJ**. *Characterization of peptides encoded by upstream open reading frames*. 2012. Honours Dissertation, University of Queensland, Australia.

INVITED AND/OR PEER-SELECTED ORAL PRESENTATIONS:

INTERNATIONAL MEETINGS:

- | | |
|--|---------|
| 1. Alzheimer's Association International Conference, Toronto | 07/2025 |
| 2. AAIC – Neuroscience Next, San Francisco, CA | 04/2024 |
| 3. American Society of Human Genetics, Los Angeles, CA | 09/2022 |

NATIONAL MEETINGS:

- | | |
|---|---------|
| 1. Charleston Conference on Alzheimer's Disease, San Juan, PR | 04/2025 |
| 2. 2 nd Annual HABS-HD Meeting, Fort-Worth, TX | 09/2024 |

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|--|---------|
| 3. Alzheimer's Disease Research Center's Spring Meeting, Los Angeles, CA | 05/2022 |
| 4. Charleston Conference on Alzheimer's Disease, Honolulu, HI | 04/2022 |
| 5. Heartland Center for Mitochondrial Medicine Symposium, Kansas City, MO. | 09/2018 |

REGIONAL MEETINGS:

- | | |
|--|---------|
| 1. UCSF Dementia Day, San Francisco, CA | 10/2023 |
| 2. Bay Area Alzheimer's Disease Researchers Symposium, San Francisco, CA | 06/2023 |

INVITED SEMINARS (NATIONAL OR INTERNATIONAL):

- | | |
|--|---------|
| 1. Washington University in St. Louis, NeuroGenomics and Informatics Center | 04/2026 |
| 2. QIMR Berghofer Medical Research Institute, Brisbane, Aus. | 03/2026 |
| 3. The Westmead Institute for Medical Research, Sydney, Aus. | 05/2023 |
| 4. University of North Texas, Health Science Center, Fort Worth, TX | 04/2023 |
| 5. Washington University in St. Louis, NeuroGenomics and Informatics Center (Remote) | 01/2022 |
| 6. Icahn School of Medicine at Mount Sinai, New York, NY | 09/2017 |
| 7. University of Alberta, Edmonton, Canada. | 09/2017 |
| 8. University of Edinburgh, Edinburgh, United Kingdom | 06/2017 |

INVITED SEMINARS (REGIONAL OR LOCAL):

- | | |
|--|---------|
| 1. Stanford University, Professional Research Enhancement Program (PREP), Stanford, CA | 04/2026 |
| 2. University of California, San Francisco, Memory and Aging Center Grand Rounds, San Francisco, CA | 04/2023 |
| 3. University of California, San Francisco, Institute of Human Genetics Seminar Series San Francisco, CA | 04/2022 |
| 4. Australian National University, John Curtin School of Medical Research, Canberra, Aus. | 06/2017 |

PUBLIC OUTREACH:

- | | |
|---|---------|
| 1. Dementia Researcher, Podcast (Host) | 07/2025 |
| 2. Dementia Researcher, Podcast (Guest) | 07/2024 |
| 3. Dementia Researcher Salon, Podcast (Guest) | 06/2024 |
| 4. Sunday Dreaming, The National Centre for Indigenous Genomics | 04/2015 |
| 5. John Curtin School of Medical Research Open Day | 08/2014 |

EDUCATIONAL CONTRIBUTIONS:

DIRECT TEACHING/PRECEPTING/SUPERVISING:

- **University of California, San Francisco**

F31 Grant Writing – Course Instructor	2025
Full course, 4 lectures (4 hours)	
BMI219 Methods in Genetic Epidemiology – Course Instructor	2024-pres
Full course, 9 lectures (18 hours)	
GRAD214 Responsible Conduct of Research and Rigor & Reproducibility – Lecturer	2024-25
Small group discussion leader, 1 lecture (2 hours)	
JAM23 Justice and Advocacy in Medicine – Lecturer	2023
Genetics of Common Disease	
EPI201 Responsible Conduct of Research Course for Clinical Researchers – Lecturer	2023
Small group discussion leader, 7 Lectures (7 hours)	
- **Icahn School of Medicine at Mount Sinai**

Aging and Neurodegeneration – Lecturer	2021 – 2022
“Genetic Approaches to Alzheimer’s Disease Susceptibility” (1 hour)	
• Australian National University	
POPH1891 Life Course Approaches to Human Ageing – Lecturer	2017 – 2018
“Genetics in Human Disease” (3 hours)	
POPH8315 Methods in Applied Epidemiological Research – Lecturer	2017
“Study Design” (1 hour)	

ADVISING AND MENTORSHIP:

Postdoc

- Paulina Tolosa-Tort	Department of Psychiatry and Behavioral Sciences University of California, San Francisco	12/2024 – Present
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Graduate

- Esther Cho	MPh Program, Genetic Counseling University of California San Francisco	2025 - Pres
- Michelle Li	MPh Program, Health Data Science University of California San Francisco	2025 - 2026
- Isobel Beasley (Rot)	PhD Program, BMI University of California San Francisco	Spring 2025
- Annabel Menendez (Rot)	PhD Program, PSPG University of California San Francisco	Fall 2024
- Daphne Yu	MPh Program, Health Data Science University of California San Francisco	2024 – 2025
- Meri Okorie	PhD Program, PSPG University of California San Francisco	2024 – 2026
- Tim McNerny	PhD Program, Medical Sciences Australian National University	2017 – 2024
- Brian Alveraz	MPh Program, Biomedical Sciences Icahn School of Medicine at Mount Sinai	2022 – 2023

Rot: Rotation student

Undergraduate

- Maggie Livezey	San Francisco State University CHANGE-SF Intern	Winter 2026
- Nia Spadoni	San Francisco State University CHANGE-SF Intern	Winter 2025
- Ariana Ramirez	San Francisco State University CHANGE-SF Intern	2023 – 2024
- Devashi Paliwal	Australian National University	2019 – 2021
- Jahnvi Patel	University of Pennsylvania	Summer 2021
- Jessica Raviv	Brown University	Summer 2020

Highschool

- Youyou Dai	San Francisco High School CURE Intern	Summer 2026
- Annaly Tran	Okaland High School CURE Intern	Summer 2026
- Roschelle Gaité	Thurgood Marshall High School	Summer 2025

- Masao Tong	CURE Intern Las Lomas High School	Summer 2024
- Luis Huebra	CURE Intern Pittsburg High CURE Intern	Summer 2023

Staff

- Aadrita Chatterjee	Research Assistant	2022 – 2025
- Ana Boeriu	Data Analyst	2024 – Present
- Rakshya Sharma	Bioinformatician	2024 – Present
- Nadia Harerimana	Data Analyst	2020 – 2022

Visiting Scholars

- Samantha Lucciola	Visiting Scholar (University of São Paulo, Brazil)	2023 – Present
- Roxanna Korologou-Linden	Visiting Scholar (Bristol University, UK)	2023

PHD ADVISORY AND EXAMINATION COMMITTEES:

- Isobel Beasly	PhD Candidate, BMI, UCSF Advisors: Dara Torgensun <i>Qualifying Exam</i>	04/2026
- Sarina Garcia	PhD Candidate, PSPG, UCSF Advisors: Jennifer Rosenbluth <i>Qualifying Exam</i>	07/2025
- Nanase Toda	PhD Candidate, PSPG, UCSF Advisors: Akinyemi O. Oni-Orisan <i>Qualifying Exam</i>	04/2025
- Brendan Mitchell	PhD Candidate, Bioengineering, UC Berkley-UCSF Advisors: Marina Sirota & Duygu Tosun-Turgut <i>Qualifying Exam</i>	10/2024
- Carlota Pereda Serras	PhD Candidate, PSPG, UCSF Advisor: Marina Sirota <i>Qualifying Exam</i>	06/2024
- Wes Spiller	PhD Candidate, University of Bristol Advisors: Eleanor Sanders, George Davy Smith, Jack Bowden <i>External Examiner</i>	08/2022

GRADUATE PROGRAMS INTERVIEWING COMMITTEES:

- PhD Program in Biological and Medical Informatics (BMI), UCSF	2023 – Present
- PhD Program in Pharmaceutical Sciences and Pharmacogenomics (PSPG), UCSF	2024 – Present

ACADEMIC SERVICE:

NATIONAL/INTERNATIONAL

• American Society of Human Genetics, conference: Session Chair Washington, DC	11/2023
• Alzheimer's Association International Conference: Session Chair Amsterdam, Netherlands	06/2023

LOCAL/REGIONAL

- Gender Equity Committee 2017
The Australian National University, Research School of Population Health
- John Curtin School of Medical Research Association of Research Students (JARS) 08/2014 – 09/2016
The Australian National University, John Curtin School of Medical Research

MEMBERSHIP AND POSITIONS

- **National/International**
 - International Society to Advance Alzheimer's Research and Treatment (ISTAART), 2017 – Present member
 - American Society of Human Genetics (ASHG) – member 2022 – Present
- **Local/Regional**
 - Institute of Human Genetics, UCSF – Faculty 2022 – Present
 - Backer Computational Health Sciences Institute, UCSF – Faculty 2022 – Present
 - Biological and Medical Informatics Phd Program, UCSF – Core Faculty 2022 – Present
 - Pharmaceutical Sciences and Pharmacogenomics PhD program, UCSF – Faculty 2024 – Present

GRANT REVIEWER

- **TDRA Seed Fund:** Ad-hoc reviewer 2023 – Present
- **Alzheimer's Association:** Ad-hoc reviewer 2023 – Present
- **UCSF Resource Allocation Program:** Ad-hoc reviewer 2024 – Present
- **NIH study section ZRG1 AN Q55:** Ad-hoc reviewer 04/2025
- **NIH study section Analytics and Statistics for Population Research Panel B (ASPB):** 08/2025
Ad-hoc reviewer
- **NIH study section Analytics and Statistics for Population Research Panel A (ASPA):** 12/2025
Ad-hoc reviewer
- **Texas Alzheimer's Research and Care Consortium:** Ad-hoc reviewer 08/2025
- **NIH study section Analytics and Statistics for Population Research Panel A (ASPA):** 07/2026 – Present
Standing Member

PEER REVIEW

Nature Reviews Neuroscience, Annals of Neurology, Lancet Neurology, JAMA Neurology, Journal of Alzheimer's Disease, Journal of Alzheimer's Disease, Neurobiology of Aging, Alzheimer's & Dementia, Alzheimer's Research & Therapy, Neurology, Epilepsia, Scientific Reports, Human Molecular Genetics, JAD Reports, Journal of Psychiatric Research, Neurobiology of Disease, Brain, Brain Communications, Current Alzheimer Research, Journal of Clinical Epidemiology, Neurology Genetics, Molecular Neurodegeneration

<https://www.webofscience.com/wos/author/rid/I-1907-2019>

EDITORIAL BOARD

- Journal of Alzheimer's Disease - Associate Editor 2020 – 2021
- Journal of Alzheimer's Disease - Associate Editor 2015 – 2018
- ANU Undergraduate Research Journal - Sub-editor 2013 – 2014