

Casaletto Lab at the University of California, San Francisco (UCSF) Memory and Aging Center (MAC)

The MAC is dedicated to providing the highest quality of care for individuals with cognitive problems, conducting research on causes and cures for degenerative brain diseases, and educating health professionals, patients and their families. Multidisciplinary research and clinical opportunities will range from age-associated brain changes to typical (e.g., Alzheimer's disease) and atypical (e.g., frontotemporal dementia, primary progressive aphasia, synucleinopathies, progressive supranuclear palsy, prion disease) neurodegenerative syndromes. We have large, deeply phenotyped research cohorts with an extensive research infrastructure that supports standard and experimental neuropsychological and neurological measures, digital biomarkers, structural and functional MRI, amyloid and tau PET, genetics, and biofluid proteomics (e.g., inflammatory markers).

[The Casaletto lab](#) aims to understand biologic and behavioral drivers of cognitive resilience and dementia prevention. Our work leverages lifestyle behaviors as a tool to understand brain health, with a focus on identifying underlying biological mechanisms and precision approaches to behavioral intervention. We focus on disease agnostic targets (e.g., synaptic functioning, immunologic functioning, vascular health) as bridging biologies for cognitive resilience. Ongoing studies include a large, longitudinal cohort of deeply phenotyped older adults, including smartwatch monitoring, a randomized controlled trial of lifestyle behaviors ([ActAN Study](#)), and often leverages novel biofluid marker approaches (plasma, CSF). (Kaitlin.casaletto@ucsf.edu)

Selected Publications:

[Sex-specific effects of SNAP-25 genotype on verbal memory and Alzheimer's disease biomarkers in clinically normal older adults.](#)

Alzheimer's & dementia : the journal of the Alzheimer's Association

Saloner R, Paolillo EW, Wojta KJ, Fonseca C, Gontrum EQ, Lario-Lago A, Rabinovici GD, Yokoyama JS, Rexach JE, Kramer JH, Casaletto KB

[Regional Vulnerability of the Corpus Callosum in the Context of Cardiovascular Risk.](#)

Journal of geriatric psychiatry and neurology

VandeBunte AM, Fonseca C, Paolillo EW, Gontrum E, Lee SY, Kramer JH, Casaletto KB

[Association of Physical Activity With Neurofilament Light Chain Trajectories in Autosomal Dominant Frontotemporal Lobar Degeneration Variant Carriers.](#)

JAMA neurology

Casaletto KB, Kornack J, Paolillo EW, Rojas JC, VandeBunte A, Staffaroni AS, Lee S, Heuer H, Forsberg L, Ramos EM, Miller BL, Kramer JH, Yaffe K, Petrucelli L, Boxer A, Boeve B, Gendron TF, Rosen H, ALLFTD Consortium

[AD and non-AD mediators of the pathway between the APOE genotype and cognition.](#)

Alzheimer's & dementia : the journal of the Alzheimer's Association

Nichols E, Brickman AM, Casaletto KB, Dams-O'Connor K, George KM, Kumar RG, Palta P, Rabin JS, Satizabal CL, Schneider J, Pa J, La Joie R

[Sex Differences in the Relationship between Perceived Stress and Cognitive Trajectories.](#)

The American journal of geriatric psychiatry : official journal of the American Association for Geriatric Psychiatry

Paolillo EW, You M, Gontrum E, Saloner R, Gaynor LS, Kramer JH, Casaletto KB

[Sex-specific effects of microglial activation on Alzheimer's disease proteinopathy in older adults.](#)

Brain : a journal of neurology

Casaletto KB, Nichols E, Aslanyan V, Simone SM, Rabin JS, LaJoie R, Brickman AM, Dams-O'Connor K, Palta P, Kumar RG, George KM, Satizabal CL, Schneider J, Pa J

[Physical activity measurement in older adults: Wearables versus self-report.](#)

Frontiers in digital health

VandeBunte A, Gontrum E, Goldberger L, Fonseca C, Djukic N, You M, Kramer JH, Casaletto KB

[Combined Effects of Synaptic and Axonal Integrity on Longitudinal Gray Matter Atrophy in Cognitively Unimpaired Adults.](#)

Neurology

Saloner R, Fonseca C, Paolillo EW, Asken BM, Djukic NA, Lee S, Nilsson J, Brinkmalm A, Blennow K, Zetterberg H, Kramer JH, Casaletto KB

[Late-life physical activity relates to brain tissue synaptic integrity markers in older adults.](#)

Alzheimer's & dementia : the journal of the Alzheimer's Association

Casaletto K, Ramos-Miguel A, VandeBunte A, Memel M, Buchman A, Bennett D, Honer W

More information: For more information, please review the MAC website

(<http://memory.ucsf.edu/>) and/or email Dr. Casaletto (Kaitlin.casaletto@ucsf.edu) with any questions.