

## Alexandra Nicole Trelle

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### Publications

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#### PUBLICATIONS

- **Effects of  $\alpha$ -synuclein pathology on synaptic dysfunction and clinical outcomes in normal aging.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*  
Winer, J. R., Plastini, M. J., Romero, A., Vossler, H., Sai, I., Channappa, D., Abdelnour, C., Shahid-Besanti, M., Wilson, E. N., Oh, H. S., Young, C. B., Trelle, A., Yutsis, et al  
2026; 22 (5): e71455
- **Plasma proteomic signatures of preclinical Alzheimer's disease in clinically unimpaired older adults.** *Molecular neurodegeneration*  
Trelle, A. N., Cody, K. A., Nguyen, T. T., Winer, J. R., Weiss, S., Sai, I., Ward, T., Cheng, G., Channappa, D., Mendiola, J., Al-Rajhi, A., Raghuraman, K., Sha, et al  
2026
- **Top-down attention and Alzheimer's pathology affect cortical selectivity during learning, influencing episodic memory in older adults.** *Science advances*  
Sheng, J., Trelle, A. N., Romero, A., Park, J., Tran, T. T., Sha, S. J., Andreasson, K. I., Wilson, E. N., Mormino, E. C., Wagner, A. D.  
2025; 11 (24): eads4206
- **A cerebrospinal fluid synaptic protein biomarker for prediction of cognitive resilience versus decline in Alzheimer's disease.** *Nature medicine*  
Oh, H. S., Urey, D. Y., Karlsson, L., Zhu, Z., Shen, Y., Farinas, A., Timsina, J., Duggan, M. R., Chen, J., Guldner, I. H., Morshed, N., Yang, C., Western, et al  
2025
- **Plasma A $\beta$ 42/A $\beta$ 40 is sensitive to early cerebral amyloid accumulation and predicts risk of cognitive decline across the Alzheimer's disease spectrum.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*  
Trelle, A. N., Young, C. B., Vossler, H., Ramos Benitez, J., Cody, K. A., Mendiola, J. H., Swarovski, M. S., Guen, Y. L., Feinstein, I., Butler, R. R., Channappa, D., Romero, A., Park, et al  
2024
- **Top-down attention and Alzheimer's pathology impact cortical selectivity during learning, influencing episodic memory in older adults.** *bioRxiv : the preprint server for biology*  
Sheng, J., Trelle, A. N., Romero, A., Park, J., Tran, T. T., Sha, S. J., Andreasson, K. I., Wilson, E. N., Mormino, E. C., Wagner, A. D.  
2024
- **Clinical Manifestations.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*  
Taghavi, H. M., Karimpoor, M., van Staaldin, E., Leventis, S., Young, C. B., Carlson, M. L., Davidzon, G. A., Romero, A., Trelle, A. N., Zaharchuk, G., Vossler, H., Rosenberg, J., Poston, et al  
2024; 20 Suppl 3: e092936
- **Developing Topics.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*  
Winer, J. R., Plastini, M. J., Romero, A., Wilson, E. N., Young, C. B., Trelle, A. N., Henderson, V. W., Wagner, A. D., Poston, K. L., Mormino, E.  
2024; 20 Suppl 8: e095792
- **Public Health.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*  
Lu, O., Mormino, E., He, Z., Carr, V. A., Trelle, A. N., Young, C. B., Romero, A., Vossler, H., Park, J., Skylar-Scott, I. A.  
2024; 20 Suppl 7: e084160

- **Elevated tau in the piriform cortex in Alzheimer's but not Parkinson's disease using PET-MR.** *Alzheimer's & dementia (Amsterdam, Netherlands)*  
Moein Taghavi, H., Karimpoor, M., van Staalduinen, E. K., Young, C. B., Georgiadis, M., Leventis, S., Carlson, M., Romero, A., Trelle, A., Vossler, H., Yutsis, M., Rosenberg, J., Davidzon, et al  
2024; 16 (4): e70040
- **[18F]PI-2620 Tau PET signal across the aging and Alzheimer's disease clinical spectrum.** *Imaging neuroscience (Cambridge, Mass.)*  
Young, C. B., Vossler, H., Romero, A., Smith, V., Park, J., Trelle, A. N., Winer, J. R., Wilson, E. N., Zeineh, M. M., Sha, S. J., Khalighi, M., Yutsis, M. V., Morales, et al  
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- **[18F]PI-2620 Tau PET signal across the aging and Alzheimer's disease clinical spectrum** *IMAGING NEUROSCIENCE*  
Young, C. B., Vossler, H., Romero, A., Smith, V., Park, J., Trelle, A. N., Winer, J. R., Wilson, E. N., Zeineh, M. M., Sha, S. J., Khalighi, M., Yutsis, M. V., Morales, et al  
2024; 2: 18
- **Comprehensive proteomics of CSF, plasma, and urine identify DDC and other biomarkers of early Parkinson's disease.** *Acta neuropathologica*  
Rutledge, J., Lehallier, B., Zarifkar, P., Losada, P. M., Shahid-Besanti, M., Western, D., Gorijala, P., Ryman, S., Yutsis, M., Deutsch, G. K., Mormino, E., Trelle, A., Wagner, et al  
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- **Post-translational modifications linked to preclinical Alzheimer's disease-related pathological and cognitive changes.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*  
Abiose, O., Rutledge, J., Moran-Losada, P., Belloy, M. E., Wilson, E. N., He, Z., Trelle, A. N., Channappa, D., Romero, A., Park, J., Yutsis, M. V., Sha, S. J., Andreasson, et al  
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- **Cerebrospinal fluid immune dysregulation during healthy brain aging and cognitive impairment.** *Cell*  
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- **Performance of a fully-automated Lumipulse plasma phospho-tau181 assay for Alzheimer's disease.** *Alzheimer's research & therapy*  
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2022; 14 (1): 172
- **Medial temporal lobe structure, mnemonic and perceptual discrimination in healthy older adults and those at risk for mild cognitive impairment.** *Neurobiology of aging*  
Gellersen, H. M., Trelle, A. N., Farrar, B. G., Coughlan, G., Korkki, S. M., Henson, R. N., Simons, J. S.  
2022; 122: 88-106
- **Thalamic nuclei atrophy at high and heterogenous rates during cognitively unimpaired human aging.** *NeuroImage*  
Choi, E. Y., Tian, L., Su, J. H., Radovan, M. T., Tourdias, T., Tran, T. T., Trelle, A. N., Mormino, E., Wagner, A. D., Rutt, B. K.  
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- **Executive function and high ambiguity perceptual discrimination contribute to individual differences in mnemonic discrimination in older adults.** *Cognition*  
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2021; 209: 104556
- **Association of CSF Biomarkers with Hippocampal-dependent Memory in Preclinical Alzheimer Disease.** *Neurology*  
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- **Tau PET imaging with 18F-PI-2620 in aging and neurodegenerative diseases.** *European journal of nuclear medicine and molecular imaging*  
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- **Neural evidence for age-related differences in representational quality and strategic retrieval processes.** *Neurobiology of aging*  
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- **Dissociable contributions of thalamic nuclei to recognition memory: novel evidence from a case of medial dorsal thalamic damage** *LEARNING & MEMORY*  
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- **Declines in Representational Quality and Strategic Retrieval Processes Contribute to Age-Related Increases in False Recognition** *JOURNAL OF EXPERIMENTAL PSYCHOLOGY-LEARNING MEMORY AND COGNITION*  
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Trelle, A.  
2014; 34 (43): 14167–69
- **Hyper-Binding Across Time: Age Differences in the Effect of Temporal Proximity on Paired-Associate Learning** *JOURNAL OF EXPERIMENTAL PSYCHOLOGY-LEARNING MEMORY AND COGNITION*  
Campbell, K. L., Trelle, A., Hasher, L.  
2014; 40 (1): 293–99