CURRICULUM VITAE LOUISA THOMPSON

Licensed Clinical Neuropsychologist Assistant Professor (Research), Department of Psychiatry & Human Behavior Warren Alpert Medical School of Brown University Providence, RI Office: (401) 455-6641 Email: Louisa_thompson@brown.edu

EDUCATION

| Undergraduate | Oberlin College, BA (Hons), Majors: Psychology and Neuroscience, 2008 |
|-----------------------|---|
| Doctoral | City University of New York Graduate Center, Clinical Psychology (Neuropsychology emphasis), Ph.D., 2017 |
| POSTGRADUATE TRAINING | |
| Residency | University of California San Diego, Clinical Psychology, 2016-2017 |
| Fellowship | Postdoctoral Fellow, Alpert Medical School of Brown University, 2017-2019 |
| HONORS AND AWARDS | |
| | Loan Repayment Program Award, NIH/NIA, 2021- |
| | IMPACT-AD Fellowship Track Program, Alzheimer's Association & NIH/NIA, 2020 |
| | University Fellowship, CUNY Graduate Center, 2015 |
| | Travel & Conference Award, CUNY Graduate Center, 2012, 2014 |
| | Graduate Teaching Assistantship Award, Hunter College, 2013-2014 |
| | Graduate Research Assistantship Award, CUNY Graduate Center, 2010-2011 |

Stetson-Heiser Prize for Psychology Research, Oberlin College, 2008

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Licensed Psychologist, Rhode Island, April, 2019

HOSPITAL APPOINTMENTS

Neuropsychology extern, NYU Winthrop University Hospital, Department of Geriatrics, 2013-2014

Neuropsychology extern, NYU Langone Health, Comprehensive Epilepsy Center, 2014-2015

Neuropsychology extern, Weill Cornell Medical Center/New York Presbyterian Hospital, 2015-2016

Allied Professional Staff Clinical Psychologist, Butler Hospital, 2019 - present

Research Scientist, Memory & Aging Program, Butler Hospital, 2019-2023

Associate Director of Research, Memory & Aging Program, Butler Hospital, 2023 - present

ACADEMIC APPOINTMENTS

Instructor, Department of Psychiatry and Human Behavior, Alpert Medical School of Brown University, 2019-2020

Assistant Professor, Department of Psychiatry and Human Behavior, Alpert Medical School of Brown University, 2020-Present

OTHER APPOINTMENTS

Psychology extern, Queens College Psychological Center, 2012-2013

Student representative, Queens College Clinical Psychology ANST Group, 2015-16

Ad-hoc Reviewer, Alzheimer's Research & Therapy, Journal of Alzheimer's Disease, Alzheimer's & Dementia, Alzheimer's & Dementia: Diagnosis, Assessment and Disease Monitoring, Dementia and Geriatric Cognitive Disorders, Journal of Prevention of Alzheimer's disease, Journal of Clinical and Experimental Neuropsychology

MEMBERSHIP IN SOCIETIES, COMMITTEES, AND CONSORTIA

| Society memberships: | Alzheimer's Association ISTAART International Neuropsychological Society |
|---------------------------|--|
| National Committees: | Member, NIH/NIA Genetic and Biomarker Disclosure Working Group 2019 – 2022 AGCD-3 Study Section Committee, National |
| International Committees: | Institute on Aging, 2023-2024 <i>Program committee member</i> , International Neuropsychological Society, 2019, 2020, 2021, 2022 Meetings |
| | <i>Member</i> , Dementia Special Interest Group, International Neuropsychological Society, 2020 - |
| | <i>Member</i> , Technology Working Group, Cognition Professional Interest Area, Alzheimer's Association ISTAART, 2021- |
| | <i>Reviewer</i> , Alzheimer's Association Grant Reviewer Committee, 2021, 2022, 2023 |

PUBLICATIONS LIST

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

- 1. Darling, N., Cohan, C., Burns, A., & **Thompson, L.** (2008). Within-family conflict behaviors as predictors of conflict and relationship satisfaction in adolescent romantic relations. *Journal of Adolescence, 31*(6), 671-690.
- 2. Milner, T.A., **Thompson, L**., Wang, G., et al. (2010). Distribution of estrogen receptor beta containing cells in the brains of bacterial artificial chromosome transgenic mice. *Brain Research*, *1351*, 74-96.
- 3. Williams, T.J., Mitterling, K.L., **Thompson, L.**, et al. (2011). Age- and hormoneregulation of opioid peptides and synaptic proteins in the rat dorsal hippocampal formation. *Brain Research*, *1379*, 71-85.

- 4. Golub, S., Starks, T., Kowalczyk, W., **Thompson, L**., Parsons, J. (2012) Profiles of executive functioning: associations with substance dependence and risky sexual behavior. *Psychology of Addictive Behaviors, 26*(4), 895-905.
- 5. Akama, K.T, **Thompson, L**., Milner, T.A., McEwen, B.S. (2013). PSD-95 binding capacity of GPR30, an estrogen receptor that can be identified in CA1 dendritic spines in vivo. *Journal of Biological Chemistry*, 288(9), 6438-6450.
- 6. Waters, E., **Thompson, L.,** Patel, P., . . . et al., (2015). G protein-coupled estrogen receptor 1 (GPER1) is anatomically positioned to modulate synaptic plasticity in the mouse hippocampus. *Journal of Neuroscience*, *35*(6), 2384-2397.
- Golub, S.A., Thompson, L., Kowalczyk, W. (2016). Affective differences in Iowa Gambling Task performance associated with sexual risk taking and substance use among men who have sex with men. *Journal of Clinical and Experimental Neuropsychology*, 38(2), 141-157.
- 8. Cheng, D., **Thompson, L.,** & Snyder, P. J. (2019). A Potential Association Between Retinal Changes, Subjective Memory Impairment, and Anxiety in Older Adults at Risk for Alzheimer's Disease: A 27-month Pilot Study. *Frontiers in Aging Neuroscience*, *11*, 288.
- 9. Alber, J., Goldfarb, D., **Thompson, L.**, Arthur, E., ... & Van Stavern, G. P. (2020). Developing retinal biomarkers for the earliest stages of Alzheimer's disease: What we know, what we don't, and how to move forward. *Alzheimer's & Dementia*, *16*(1), 229-243.
- 10. Alber, J., Maruff, P., Santos, C. Y., Ott, B. R., Salloway, S. P., Yoo, D. C., Alber, J., Thompson, L., Cabral, D., Song, A. (2020). Disruption of cholinergic neurotransmission, within a cognitive challenge paradigm, is indicative of Aβ-related cognitive impairment in preclinical Alzheimer's disease after a 27-month delay interval. *Alzheimer's Research & Therapy*, *12*(1), 1-9.
- Thompson, L. & Jones, R. (2020). Depression screening in cognitively normal older adults: Measurement bias according to subjective memory decline, brain amyloid burden, cognitive function, and sex. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, 12(1), e12107.
- Alber J, Popescu D, Thompson L., ... & Lee, AK. (2021). Safety and Tolerability of APOE Genotyping and Disclosure in Cognitively Normal Volunteers From the Butler Alzheimer's Prevention Registry. *Journal of Geriatric Psychiatry and Neurology*. 891988721993575.
- Arthur E, Alber J, Thompson L., Sinoff S, Snyder PJ. (2021). OCTA reveals remodeling of the peripheral capillary free zones in normal aging. *Nature Scientific Reports.* 2;11(1):15593. doi: 10.1038/s41598-021-95230-0.

- 14. Janssen, O., Jansen, W. J., Vos, S. J. B., Boada, M., Parnetti, L., ... **Thompson, L.,** ... Visser, P. J. (2021). Characteristics of subjective cognitive decline associated with amyloid positivity. *Alzheimer's & Dementia*.
- Jansen, W. J., Janssen, O., Tijms, B. M., Vos, S. J., Ossenkoppele, R., Visser, P. J., ... Thompson, L., ... & Scheltens, P. (2022). Prevalence estimates of amyloid abnormality across the Alzheimer disease clinical spectrum. *JAMA neurology*, 79(3), 228-243.
- 16. Thompson, L, Harrington, K., Roque, N., Strenger, J., Correia, S., Jones, R. N., ... & Sliwinski, M. J. (2022). A highly feasible, reliable, and fully remote protocol for mobile app-based cognitive assessment in cognitively healthy older adults. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, 14(1), e12283.
- *Jutten, R., *Thompson, L., Sikkes, S., Maruff, P., Molinuevo, J.L., ... & Snyder, P. (2022). A Neuropsychological Perspective on Defining Cognitive Impairment in the Clinical Study of Alzheimer's Disease: Towards a More Continuous Approach. *Journal of Alzheimer's Disease*, 1-14. **Co-first authors*
- 18. Matusz, E., Lamar. M., Price, C., . . . Thompson, L. (2022). Dissociating Statistically Determined Normal Cognitive Abilities and Mild Cognitive Impairment Subtypes with DCTclock. *Journal of the International Neuropsychological Society*, 1-11.
- 19. Cersonsky, T., Mechery, S., Carper, M. M., **Thompson, L**., Lee, A., Alber, J., ... & Brick, L.. (2022). Using the Montreal cognitive assessment to identify individuals with subtle cognitive decline. *Neuropsychology*, *36*(5), 373.
- Cersonsky, T. E., Mechery, S., Thompson, L., Lee, A., Alber, J., Sarkar, I. N., & Brick, L. A. D. (2022). Related amyloid burden and cortical atrophy in individuals with subtle cognitive decline. *Journal of Neuroimaging*, 32(6), 1075-1079.
- 21. Lee, A. K., Collier, M. K., Thompson, L., Popescu, D., Arthur, E., Correia, S., ... & Alber, J. (2023). The Effects of Subjective Cognitive Decline on APOE Genotype Disclosure in the Butler Hospital Alzheimer's Prevention Registry. *The Journal of Prevention of Alzheimer's Disease*, 10(2), 152-161.
- 22. **Thompson, L.*,** Cummings, M.*, Emrani, S., Libon, D. J., Ang, A., Karjadi, C., ... & Liu, C. (2023). Digital Clock Drawing as an Alzheimer's Disease Susceptibility Biomarker: Associations with Genetic Risk Score and APOE in Older Adults. *The Journal of Prevention of Alzheimer's Disease*, 1-9. **Co-first authors*
- Georgakas, J. E., Howe, M. D., Thompson, L., Riera, N. M., & Riddle, M. C. (2023). Biomarkers of Alzheimer's Disease: Past, Present and Future Clinical Use. *Biomarkers* in Neuropsychiatry, 100063.
- 24. Britton, G., Joung, P., Ho, J.S., Ross, M., Albastaki, O., Thompson, L., Low, S., Philippakis, A., Levey, A., Khemakhem, M., Kim, N., & Au, R. An equal opportunity approach to reducing disparities in Alzheimer's disease and related dementia research (in press). *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*.in press DOI: 10.1002/dad2.12495

25. **Thompson, L.,** Kunicki, Z., Emrani, S., Strenger, J., De Vito, A., Britton, K., Dion, C., Harrington, K., Roque, N., Salloway, S., Sliwinski, M., Correia, S., & Jones, R.N. (in press). Remote and in-clinic digital cognitive screening tools outperform the MoCA to distinguish cerebral amyloid status among cognitively healthy older adults. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*.

PUBLICATIONS SUBMITTED OR IN PREPARATION

- Thompson, L., De Vito, A., Kunicki, Z., Emrani, S., Strenger, J., Nester, C., Harrington, K., Roque, N., Salloway, S., Correia, S., Jones, R.N., & Sliwinski, M. (<u>in preparation</u>). Adherence and validity considerations for the implementation of high frequency, smartphone-based assessment approaches for remote cognitive screening and monitoring in older adults.
- Lee, A.K., De Vito, A., Mandel, N., Popescu, D., Alber, J., Correia, S., Salloway, S., & Thompson, L. (in preparation). Dual Disclosure of APOE-4 Genotyping and Amyloid Status for Risk of Alzheimer's Disease to Cognitively Normal Research Participants: A Mixed-Methods Study.

CONFERENCE ABSTRACTS/PRESENTATIONS

- 1. Akama, K.T., **Thompson, L.**, Milner, T.A., McEwen, B. PSD-95 binding capacity of GPR30, an estrogen receptor that can be identified in CA1 dendritic spines in vivo. The *American Society for Cell Biology* Annual Meeting, December, 2011.
- 2. **Thompson, L.**, Kowalczyk, W., Golub, S. Affective differences in reward perception associated with sexual risk taking. *Center for the Study of Gene Structure and Function*, 25th Annual Symposium: The Stressed Brain in the 21st Century, Hunter College, 2012
- 3. **Thompson, L.**, Kowalczyk, W. Anxiety and depression interact with Iowa Gambling Task performance to predict substance use and sexual risk-taking behaviors. *Annual Neuropsychology Research Day*, Queens College, September, 2012.
- 4. **Thompson, L.**, Kowalczyk, W., Golub, S. Affective differences in Iowa Gambling Task performance associated with sexual risk taking. *National Academy of Neuropsychology* 32nd Annual Conference, November, 2012.
- Thompson, L., Wells, B., Parsons, J., Golub, S. Emotional distress and affective decisionmaking processes involved in sex under the influence of alcohol among emerging adults. Mid-Year Meeting of the *International Neuropsychological Society*, Amsterdam, Netherlands, July, 2013.
- 6. **Thompson, L.**, Wells, B., Parsons, J., Golub, S. Profiles of executive function in the prediction of alcohol use among emerging adults in NYC. Annual Meeting of the *International Neuropsychological Society*, Denver, Colorado, February, 2015.
- 7. **Thompson, L.**, Surace, A., & Golub, S.A. Cards, Balloons, or Dice? A comparison of risky decision-making tasks and their associations with working memory, anxiety, depression, and risk taking. Annual Meeting of the *International Neuropsychological Society*, New Orleans, Louisiana, February, 2017.
- Goldfarb, D., Snyder, P., Maruff, P., Santos, C., Ott, B., Salloway, S., Yoo, D., Noto, R. & Alber, J., Thompson, L. & Song, A. (2018). Disruption of cholinergic neurotransmission, within a cognitive challenge paradigm, predicts Aβ-related cognitive impairment in

preclinical Alzheimer's disease after a 27-month delay interval. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, *14*(7), P322-P323.

- Alber, J., Collier, M., Goldfarb, D., Thompson, L., Dawson, B., Salloway, S., & Lee, A. (2018). Safety, tolerability, and lifestyle changes associated with APOE disclosure in the Butler Alzheimer's Prevention Registry: Implications for recruitment to clinical trials. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 14*(7), P989-P990.
- 10. Cheng, D., Santos, C., **Thompson, L.,** Hernandez, K., & Snyder, P. (2018). Retinal nerve fiber layer thinning and subjective memory impairment changes in preclinical Alzheimer's disease patients. *Alzheimer's & Dementia: Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 14(7), P1204.
- Lee, A.K., Thompson, L., Collier, M., Goldfarb, D., Salloway, S., & Alber, J. (2018). The effects of subjective cognitive decline on APOE genotype disclosure in the Butler Alzheimer's Prevention Registry. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 14(7), P1071.
- 12. **Thompson, L.**, Alber, J., Hernandez, K., & Snyder, P. (2018) DCTclock[™] versus manual 10-point scoring method in predicting amyloid burden and memory performance in healthy older adults with subjective cognitive complaints. Poster presented at AAIC Chicago, IL, 2018. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 14(7), P535.
- 13. Lee, A., Menard, W., Tonini, G., **Thompson, L.,** Alber, J., Salloway, S. (2018). Reliability of a rapid APOE assay for Alzheimer's risk assessment and clinical trial screening. *The Journal of Prevention of Alzheimer's Disease*, 5(S1), s182.
- 14. Goldfarb, D., Snyder, P., Maruff, P., Santos, C., Ott, B., Salloway, S., Yoo, D., Noto, R. & Alber, J., Thompson, L. & Song, A. (2018). Disruption of cholinergic neurotransmission, within a cognitive challenge paradigm, predicts Aβ-related cognitive impairment in preclinical Alzheimer's disease after a 27-month delay interval. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 14(7), P322-P323.
- 15. **Thompson, L.,** Lee, A.K., Williams, R., Salloway, S., & Alber, J. Subjective cognitive decline before and after APOE and Amyloid PET disclosure in cognitively normal older adults screening for Alzheimer's disease prevention trials (2019). Accepted abstract to be presented at the *Alzheimer's Association International Conference*, July, 2019.
- 16. **Thompson, L.,** Arthur, E., Tonini, G., Salloway, S., & Lee A.K. (2020). Comparing the accuracy of the DCTclock and Montreal Cognitive Assessment to detect elevated cerebral amyloid in cognitively normal adults at increased genetic risk for Alzheimer's disease. *Accepted Abstract for the 2020 Cognitive Aging Conference*.
- Lee, A.K.W., Mandel, N., Popescu, D., Williams, R., Alber, J., Thompson, L. (2020). Dual disclosure of APOE genotyping and amyloid PET results to cognitively normal older adults: A qualitative analysis. *Alzheimer's & Dementia* 16. doi:10.1002/alz.046018
- Thompson, L. & Jones, R., (2020). Measurement bias in depression assessment according to brain amyloid burden, cognitive function, and sex in the A4 study. *Alzheimer's & Dementia* 16. doi:10.1002/alz.043613
- Aker, R., Arthur, E., Thompson, L., Maruff, P., Snyder, P., Alber, J., 2020. Development of the Snellen Memory Test (SMT): An episodic memory test to screen for AD risk in a clinical optometry/ophthalmology setting. *Alzheimer's & Dementia* 16.doi:10.1002/alz.045307
- Alber, J., Arthur, E., Thompson, L.I., Goldfarb, D., Fernandez, B.M., Salloway, S.P., Sinoff, S., Snyder, P.J., 2020. The Atlas of Retinal Imaging in Alzheimer's Study (ARIAS): Study design and objectives. *Alzheimer's & Dementia* 16. doi:10.1002/alz.045325

- 21. Cersonsky, T., Mechery, S., Carper, M., Thompson, L., Sarkar, I.N.; Brick, L. (2020). Using Montreal Cognitive Assessment for clinical decision support in identifying individuals with subtle cognitive decline. 13th Annual Warren Alpert Medical School Academic Symposium. Brown University, November 18th, 2020.
- 22. Strenger, J., Alber, J., Arthur, E., Snyder, PJ., Sinoff, S., & **Thompson, L.** (2021). Validation of a 4-item subjective cognitive decline screening questionnaire in cognitively normal older adults. *2021 Alzheimer's Association International Conference*, virtual.
- 23. Thompson, L., Harrington, K., Roque, N., Strenger, J., ... Salloway, S. & Sliwinski, M. (2021). Use of app-based cognitive assessments during the COVID-19 pandemic: feasibility, acceptability, and reliability among cognitively normal older adults. Abstract presented at the *Clinical Trials on Alzheimer's Disease (CTAD) Annual Conference*, Boston, MA, November, 2021.
- 24. De Vito, A., Kunicki, Z. J., Britton, K., Correia, S., & **Thompson, L.** (2022). Intraindividual variability on digital cognitive assessments differs by amyloidosis status in cognitively normal older adults. *Presented virtually at the annual meeting of Mind-Brain Research Day at Brown University, Providence, RI.*
- 25. Harrington, K., Roque, N., Strenger, J., Correia, S. Salloway, S., Sliwinski, M., & Thompson, L., Loneliness and subjective cognitive impairment in preclinical Alzheimer's disease and healthy aging. 2022 Alzheimer's Association International Conference, San Diego, CA. 8/03/2022.
- 26. Au, R., Joung, P., Ho, J.S., Albastaki, O., Thompson, L., Low, S., Philippakis, A., & Levey, A. (2022) Davos Alzheimer's Collaborative: Building a globally representative cohort through a technologically-enabled approach. 2022 Alzheimer's Association International Conference, San Diego, CA. 8/03/2022.
- 27. Emrani, S., Strenger, J., Kunicki, Z., De Vito, A., Salloway, S. & **Thompson, L.,** Psychometric properties of DCTclock with commonly used neuropsychological tests and their combined ability to predict Beta-Amyloid Positron Emission Tomography Status. 2023 Annual Meeting of the International Neuropsychological Society, San Diego, CA.
- 28. De Vito, A., Kunicki, Z., Britton, K., Villa, P., Strenger, J., Harrington, K., Roque, N., Sliwinski, M., & **Thompson, L.** Intraindividual Variability in Processing Speed on Digital Cognitive Assessments Differs by Amyloidosis Status in Cognitively Normal Older Adults. 2023 Annual Meeting of the International Neuropsychological Society, San Diego, CA.
- 29. Thompson, L., Strenger, J., Emrani, S., De Vito, A., Harrington, K., Roque, N., Salloway, S., Sliwinski. M., & Correia, S. Remote Smartphone-Based Assessment Predicts Standard Neuropsychological Test Performance and Cerebral Amyloid Status in Cognitively Normal Older Adults. 2023 Annual Meeting of the International Neuropsychological Society, San Diego, CA.
- 30. Strenger, J., Riera, N., Harrington, K., Roque, N., Salloway, S., Sliwinski, M., &, Thompson, L. Variability in Remote, Self-Administered Assessment Performance Associated with Self-Reported Memory Perceptions Among Older Adults. 2023 Annual Meeting of the International Neuropsychological Society, San Diego, CA.
- 31. Dion, C., Kunicki, K., Emrani, S., Strenger, J., De Vito, A., Britton, K., Harrington, K., Roque, N., Salloway, S., Sliwinski, M., Correia, S., Jones, R., & Thompson, L. Remote and in-clinic digital cognitive screening outperforms the MoCA to distinguish cerebral amyloid status among cognitively healthy older adults. *Alzheimer's Association International Conference, Amsterdam, Netherlands, 2023.* Technology & Dementia Preconference Flash Talk.

- 32. Strenger, J., Emrani, S., Kunicki, K., Harrington, K., Roque, N., Sliwinski, M., Salloway, S., Correia, S., & Thompson, L. Time of day cognitive performance differences in remote, self-administered assessments and its association with cerebral amyloidosis. *Alzheimer's Association International Conference, Amsterdam, Netherlands, 2023.*
- 33. De Vito, A., Kunicki, K., Emrani, S., Strenger, J., Harrington, K., Roque, N., Sliwinski, M., Salloway, S., Correia, S., & Thompson, L. Fatigue Interacts with Amyloid Status to Predict Daily Working Memory Performance in Preclinical Alzheimer's Disease. *Alzheimer's Association International Conference, Amsterdam, Netherlands, 2023.*

INVITED PRESENTATIONS

- 1. **Thompson, L.**, Alber, J., & Lee, A. Aging and Memory Loss: What's normal, what's not, and how to make a difference. Cranston Senior Center, Cranston, RI, August, 2018.
- 2. **Thompson, L.**, Lee, A.K., Collier, M., . . . & Alber, J. APOE and amyloid PET disclosure at the Butler Memory and Aging Program. Symposium communication, *Clinical Trials on Alzheimer's Disease (CTAD) Annual Conference*, Barcelona, Spain, October, 2018.
- 3. **Thompson, L.** Cognitive and emotional assessment in preclinical Alzheimer's disease: implications for Alzheimer's prevention trials. *Alpert Medical School of Brown University Neuropsychology Rounds*, Providence, RI, March 2019.
- 4. **Thompson, L.** New directions in Alzheimer's risk assessment and clinical trials research. Bryant University, Smithfield, RI, October 2019.
- 5. **Thompson, L.** Aging & Memory Loss: What is normal, what is not and how to make a difference. Hamilton House Adult Learning Exchange, Providence, RI, February 2020.
- 6. **Thompson, L.** Feasibility of a Remote Mobile App-based Protocol for Cognitive Screening in Cognitively Normal Older Adults. *Brown University Center for Digital Health Seminar Series*. Providence, RI, March 17, 2021.
- 7. **Thompson, L.** Novel neuropsychological approaches for assessing cognitive decline in the early stages of the Alzheimer's disease continuum. *Symposium organized for the Annual meeting of the International Neuropsychological Society*, San Diego, Feb. 2-5th, 2021.
- 8. **Thompson, L.** Digital Cognitive Screening for Cognitively Healthy Older Adults: improving early detection of ADRD. *James J. Peters VA Medical Center, Clinical Psychology Residency Program Guest Lecture, April 19, 2022.*
- 9. **Thompson, L**. Developing novel cognitive assessment approaches for the early detection of Alzheimer's Disease and Related Dementias (ADRD) in primary care settings. *Northwestern Pepper Center: Center for Applied Health Research on Aging, Grand Rounds Lecture*, November, 18th, 2022.
- 10. **Thompson, L.** Remote and in-clinic digital cognitive screening outperforms the MoCA to distinguish cerebral amyloid status among cognitively healthy older adults. Technology & Dementia Preconference, *Alzheimer's Association International Conference, Amsterdam*,

Netherlands, July 15th 2023.

11. **Thompson, L.,** Improving Early Detection of Alzheimer's Disease and Related Dementias for Research and Clinical Care. *Alzheimer's Association Rhode Island Chapter, Brian D. Ott Annual Research Symposium,* December 7th, 2022.

GRANTS

PAST:

2020- 2023

Implementing digital cognitive tests for the detection of preclinical AD (PI: Thompson, L) AACSF-20-685786 Alzheimer's Association This project will This project will test a novel approach to screening for subtle cognitive changes that occur in preclinical AD, using a mobile (smartphone-based) cognitive test that is cost effective, non-invasive, and has the potential to be used across a variety of settings. Role: Principal Investigator

2021 - 2023

Validation of the DCTclock drawing task as a screening tool for prodromal Alzheimer's disease in the Framingham Heart Study (PI: Thompson, L) R21-AG072588-01

NIH/NIA

The objective of this study is to conduct a large-scale validation of the DCTclock, a digital cognitive screening measure, using existing data from the Framingham Heart Study. Our goal is to advance the DCTclock as a first line screening measure for identifying persons at risk for AD and related dementias in order to improve early detection and facilitate prevention research.

2019 - 2023

Atlas of Retinal Imaging in Alzheimer's Study (PI: Snyder, P)

Morton Plant Hospital Association

The objective of this project is to create a 'gold standard' reference database of structural anatomic and functional imaging of the retina, in order to enable the identification and development of both sensitive and reliable markers of AD risk and/or progression.

Role: Co-Investigator

LEADS Diversity Recruitment and Community Engagement in Rhode Island (PI: Lee, A)

Alzheimer's Association

This project will launch two initiatives during the 18-month period of support to promote early onset AD education and collaboration with health care practices that serve URP communities. A key objective is to spur diversity recruitment efforts for LEADS and establish lasting and scalable approaches to URP engagement at our site. Role: Co-Investigator

2019-2021

Building an Infrastructure and Dynamic Dataset for AD Risk Assessment, extension for Institutional Development Award for Clinical and Translational Research (IDeA-CTR) from the NIGMS. (PI: Padbury, J) U54GM115677 NIH/NIA This study leverages machine learning techniques to develop prediction algorithms for Alzheimer's Disease risk using novel biomarkers. Role: Co-Investigator

CURRENT:

2023-2028

Accelerating digital cognitive screening for Alzheimer's disease in the Primary Care setting (PI: Thompson, L.)

K23-AG080159

NIH/NIA

The objective of this research is to establish optimized methods for cognitive screening that are accessible, accurate and suitable for primary care settings. This project will utilize in-office testing using a tablet-based screening tool as well as remote assessment using a smartphone app-based testing platform.

2022-2027

Longitudinal validation of retinal biomarkers against cerebral biomarkers in preclinical AD (PI: Alber, J.)

R01-AG079241

NIH/NIA

The objective of this research is to advance the identification and validation of discriminatory and accurate retinal biomarkers associated with AD risk, burden, and progression. Retinal biomarkers in symptomatic AD have been investigated, but few studies have analyzed retinal biomarkers in preclinical AD, a critical period for preventative intervention.

Role: Co-Investigator

2021-2025

Developing novel cognitive and neuroimaging markers of early Alzheimer's disease pathologies (PI: Oh, H)

R01-AG068990

NIH/NIA

The goal of this research is to understand cognitive, functional, and structural changes during normal aging and pathological aging involving Alzheimer's disease pathologies in cognitively normal older adults and to develop novel cognitive and neuroimaging markers of the early stage of the disease pathologies. Role: Co-Investigator

2022-2023

Preparing for primary care-based cognitive screening interventions for the early detection of Alzheimer's disease (PI: Thompson, L)

Advance-CTR Pilot Grant, supported by the IDeA-CTR grant (U54GM115677) The objective of this research is to investigate optimized methods for cognitive screening that are accessible, accurate and suitable for primary care settings. This project will utilize in-office testing using a tablet-based screening tool as well as remote assessment using a web-based screening tool.

2021-2023

Alzheimer's Disease Biomarkers and Risk Disclosure (PI: Salloway, S.)

Warren Alpert Foundation

Validate plasma pTau-181 & pTau-217; digital cognitive assessment, and retinal imaging for early detection of Alzheimer's disease. Validate a machine-learning algorithm for identifying Alzheimer's risk and refine protocols for safe risk disclosure. Role: Co-Investigator

PENDING:

Validation of a Self-Administered Digital Cognitive Screening for the Early Detection of Cognitive Impairment in Older Adults (PI: Mankodiya, K.) Status: Submitted Phase 2 STTR NIH/NIA Role: Co-Investigator

UNIVERSITY TEACHING, ADVISING and MENTORING ROLES

Brown Undergrad. Independent Study Mentor, BIOL 1950 / 1960: 2020 (Grace Johnson), 2023 Natalie Riera

Brown Undergrad. UTRA Scholar (Natalie Riera), 2022, 2023

Mentor, Brown Diversity Mentoring Program, Spring 2020

Postdoctoral Research Mentor, Memory & Aging Program, 2021-

Clinical Psychology Internship Prog. Research Mentor, 2022-

OTHER DEPARTMENT SERVICE:

Member, Justice, Equity, Diversity, & Inclusion Council, Brown Clinical Neuropsychology Training Program, 2021 - present

Member, DPHB Antiracism Community Outreach Subcommittee, 2022 - 2023

CONSULTING:

Global Cohort Development Consultant, Davos Alzheimer's Collaborative, 2021- present