

# Stephanie L. Leal

Assistant Professor, Department of Integrative Biology & Physiology  
Adjunct Assistant Professor, Department of Psychological Sciences, Rice University  
Director of the Neuroscience of Memory, Mood, & Aging Lab  
Fellow of the UC Irvine Center for the Neurobiology of Learning and Memory (CNLM)  
Life Sciences Building, 621 Charles E Young Dr S, Los Angeles, CA 90095  
Email: stephanieleal@ucla.edu, Web: memory.ibp.ucla.edu

## **RESEARCH INTERESTS**

My laboratory performs basic and translational research to understand how our memory system works, how this system goes awry in memory and mood disorders such as Alzheimer's disease and depression, and how we might be able to modify mood, memory, and underlying neural dysfunction in these disorders. We utilize interdisciplinary approaches toward understanding memory and factors that impact memory, including high-resolution imaging techniques, PET imaging of amyloid and tau pathology, neuroendocrine and salivary approaches, and novel experimental paradigms to understand brain-behavior relationships.

## **EMPLOYMENT**

2024 - *present*, *Assistant Professor*, Department of Integrative Biology & Physiology, University of California, Los Angeles, CA

2024 - *present*, *Adjunct Assistant Professor*, Department of Psychological Sciences, Rice University, Houston, TX

2019 - 2024, *Assistant Professor*, Department of Psychological Sciences, Rice University, Houston, TX

2019 - 2024, *Adjunct Assistant Professor*, Department of Neurology, Houston Methodist Research Institute, TX

2016 - 2019, *Postdoctoral Fellow*, Helen Wills Neuroscience Institute, University of California, Berkeley, CA  
Advisor: William Jagust, M.D.

## **EDUCATION**

2011 - 2016, Ph.D., Psychological & Brain Sciences, Johns Hopkins University, Baltimore, MD  
Advisor: Michael Yassa, Ph.D.

Dissertation: "Emotional Modulation of Episodic Memory and Translational Applications to Aging and Depression-Related Cognitive Impairment"

2011 - 2013, M.A., Psychological & Brain Sciences, Johns Hopkins University, Baltimore, MD

2007 - 2011, B.S., Biopsychology, University of California, Santa Barbara, CA  
Advisors: Michael Miller, Ph.D. & Aaron Ettenberg, Ph.D.

## **AWARDS & HONORS**

2024, School of Social Sciences Open Access Publication Grant, Rice University

2018, BrightFocus Foundation Travel Award, Int. Conference on Learning & Memory

2017, Alzheimer's Association Award for Young Scientists

2017, Sallie P. Asche Travel Award, Dallas Aging & Cognition Conference

2016 - 2018, NRSA F32 Research Fellowship Award (F32AG054116), UCB

2015, Alzheimer's Association International Conference Travel Fellowship

2014, Fellowship, Summer Institute in Cognitive Neuroscience, UCSB

2013 - 2016, Pre-doctoral Fellowship, Research Training in Age-Related Cognitive Disorders

2013, Honorable Mention, NSF Graduate Research Fellowship Program

2012 - 2013, Walter L. Clark Student Collaborative Research Award, JHU

2011 - 2014, Robert S. and Dorothy L. Waldrop Graduate Fellowship, JHU

2011, Distinction in the Psychology Major, UCSB

2011, Exceptional Academic Performance in the Psychology Major, UCSB

2011, High Honors (top 6% upon graduation), UCSB

2009 - 2011, Dean's Honors, UCSB (all quarters)

## **RESEARCH SUPPORT**

### **Under Review:**

<b>NIH U24</b>	<b>Leal, S.L. (PI)</b>	<b>Under review</b>
Music Networks Pilot Research Program <i>"Evaluating the specificity of personalized music intervention on memory and underlying neurobiological profiles"</i> \$50,000 Role: Principal Investigator		
<b>One Mind Rising Star Award</b>	<b>Leal, S.L. (PI)</b>	<b>Under review</b>
<i>"Neurocognitive Signatures of Antidepressant Success: A Path to Personalized Treatment"</i> \$300,000 Role: Principal Investigator		

### **Current / Awarded:**

<b>Alzheimer's Association</b>	<b>Leal, S.L. (PI)</b>	<b>2024 - 2026</b>
Health Disparities, Policy and Ethics in Alzheimer's Disease and Dementia Research (24HPE-1287002) <i>"Impact of genetic &amp; ethnic risk factors on early imaging biomarkers of AD"</i> \$238,792.40 (Direct/Indirect) Role: Principal Investigator		
<b>Brain &amp; Behavior Research Foundation</b>	<b>Leal, S.L. (PI)</b>	<b>2023 - 2026</b>
NARSAD Young Investigator Grant (#30897) <i>"The impact of antidepressants on emotional pattern separation and medial temporal lobe dynamics"</i> \$69,600 (Direct/Total) Role: Principal Investigator		
<b>BrightFocus Foundation</b>	<b>Leal, S.L. (PI)</b>	<b>2022 - 2025</b>
Alzheimer's Disease Research Grant (A2022040S) <i>"Precise neurobiological profiling of the locus coeruleus and medial temporal lobe for the early detection of Alzheimer's disease"</i> \$299,943 (Direct/Total), 20% effort Role: Principal Investigator		
<b>National Science Foundation</b>	<b>DeLucia, P. (PI)</b>	<b>2023 - 2026</b>
REU Site: Translational Research in Psychological Sciences: Human Factors at Rice University. \$348,936 Role: Senior Personnel		
<b>Rice University</b>	<b>Leal, S.L. (PI)</b>	<b>2024 - 2026</b>
Social Sciences Research Institute Seed Grant <i>"The role of ethnic and genetic risk factors of Alzheimer's disease on memory in Latinos and non-Latinos"</i> \$10,000 Role: Principal Investigator		

### **Graduate Student / Postdoc Awards (Mentorship):**

<b>NIA F32 NRSA</b>	<b>Ballard, H.* (PI)</b>	<b>2023 - 2026</b>
Ruth L. Kirschstein National Research Service Award Individual Postdoctoral Fellowship, National Institute of Aging <i>"Estrogen Declines with Menopause: Impacts on the Medial Temporal Lobe Network and Emotional Memory in Aging Females at Genetic Risk for Alzheimer's Disease"</i> \$211,494 Role: Sponsor		
<b>Rice University</b>	<b>Morales-Calva, F.*, &amp; Leal, S.L.</b>	<b>2023 - 2024</b>

BRIDGE Seed Grant

*"The Impact of Ethnic and Genetic Risk Factors of Alzheimer's Disease on Memory"*

\$5,000

Role: Principal Investigator (Multi-PI)

**American Psychological Association**

**Morales-Calva, F.\* (PI)**

**2023 - 2025**

APAGS Psychological Science Research Grant

2023 Diversity Grant

*"Measuring the impact of ethnic and genetic risk factors of Alzheimer's disease on memory"*

\$1,000

Role: Graduate Student Advisor

**National Science Foundation**

**Castro, M.\* (PI)**

**2022 - 2025**

Graduate Research Fellowship Program

Role: Graduate Student Advisor

**Rice University**

**Morales-Calva, F.\* (PI)**

**2023 - 2024**

Social Sciences Research Institute, Pre-Dissertation Research Grant

*"The Impact of Image Memorability on Memory and Applications to Aging"*

\$3,000

Role: Graduate Student Advisor

**Rice University**

**Clark, K.\* (PI)**

**2024 - 2025**

Social Sciences Research Institute, Pre-Dissertation Research Grant

*"Neurobiological and Physiological Correlates of Personalized Music-Induced Emotional Arousal on Memory Consolidation"*

\$3,000

Role: Graduate Student Advisor

**Rice University**

**Castro, M.\* (PI)**

**2024 - 2025**

Social Sciences Research Institute, Pre-Dissertation Research Grant

*"The Impact of Antidepressant Treatment on Memory and Hippocampal Neurogenesis"*

\$3,000

Role: Graduate Student Advisor

**Rice University**

**Ferguson, L.\* (PI)**

**2024 - 2025**

Social Sciences Research Institute, Dissertation Research Improvement Grant

*"Examination of the Role of Retirement on Memory and Neuroimaging Biomarkers of Alzheimer's Disease in Healthy and Depressed Older Adults"*

\$5,000

Role: Graduate Student Advisor

**Rice University**

**Ballard, H.\* (PI)**

**2022 - 2024**

Rice University Academy of Fellows

*"Estrogen declines with menopause: impacts on the medial temporal lobe network and emotional memory in aging females at risk for Alzheimer's disease"*

\$65,000

Role: Senior Fellow/Mentor

**Rice University**

**Clark, K.\* (PI)**

**2025 - 2026**

Social Sciences Research Institute, Dissertation Research Improvement Grant

*"Evaluating the Specificity of Personalized Music Intervention on Memory and Underlying Neurobiological Profiles"*

\$5,000

Role: Graduate Student Advisor

**Completed:**

**Rice University**

**Ferguson, L.\* (PI)**

**2022 - 2023**

Social Sciences Research Institute, Pre-Dissertation Research Grant

*"The effect of neuropsychiatric symptoms on the emotional modulation"*

of memory in aging”

\$3,000

Role: Graduate Student Advisor

**Rice University** **Leal, S.L. (PI)** **2021 - 2022**

Social Sciences Research Institute Seed Grant

“The impact of education, lifetime cognitive activity, and retirement on memory in aging and in those at risk for Alzheimer’s disease.”

\$9,500

Role: Principal Investigator

**Rice University** **DeLucia, P. (PI)** **2020 - 2021**

Rice ENRICH Award

“Aging in Place with Cognitive Impairment: Toward User-Centered Assistive Technologies”

\$20,250 direct

Role: Co-Investigator

**National Science Foundation** **DeLucia, P. (PI)** **2018 - 2022**

REU Site: Translational Research in Psychological Sciences:

Human Factors at Rice University.

\$348,936

Role: Senior Personnel/Mentor

**NIA F32 AG054116** **Leal, S.L (PI)** **2016 - 2018**

Ruth L. Kirschstein National Research Service Award (NRSA)

Individual Postdoctoral Fellowship, National Institute of Aging

“Effect of tau pathology on memory consolidation in cognitively normal aging”

\$52,542

Role: Principal Investigator

**NIA T32 AG027668** **Albert, M. (PI)** **2013 - 2016**

Predocotoral Fellowship, National Institute of Aging

“Research Training in Age-Related Cognitive Disorders”

\$66,000

Role: Predocotoral fellow

## **PUBLICATIONS**

\* = undergraduate trainee, \*\* = graduate trainee, ` = high-school trainee, #NSF REU trainee

1. Wu-Chung, E. L., Kennedy, K. M., Medina, L. D., Schulz, P. E., Oswald, F. L., Heijnen, C. J., **Leal, S. L.**, Denny, B. T., Fagundes, C. P. (*in press*). Cortical thickness and low-grade inflammation moderate the association between depressive symptoms and cognitive function in early widowhood: A preliminary study. *Brain, Behavior, and Immunity*. 129, 620-633.
2. Clark, K. & **Leal, S.L.** (*in press*). Fine-tuning the details: post-encoding music differentially impacts general and detailed memory. *The Journal of Neuroscience*.
3. Ferguson, L.\*, Harikumar, A., & **Leal, S.L.** (2025). Subclinical depressive symptoms and job stress differentially impact memory in working and retired older adults. *Scientific Reports*. 15, 3163.
4. **Leal, S.L.**, Ford, J.H., & Dennis, N.A. (2025). Introduction to the special issue on individual differences in memory modulation. *Cognitive, Affective, and Behavioral Neuroscience*.
5. Morales-Calva, F.\*\* & **Leal, S.L.** (2025). Tell me *why*: The missing *w* in episodic memory’s *what*, *where*, and *when*. *Cognitive, Affective, and Behavioral Neuroscience*.
6. Ferguson, L.\*, Harikumar, A., **Leal, S.L.** (2025). Retirement through rose-colored glasses: greater positivity bias in retired relative to working older adults. *Work, Aging, and Retirement*.
7. Vas, R.\*, Phillips, T.O.\*, Ferguson, L.A.\*\*, Harikumar, A., Castro, M., & **Leal, S.L.** (2024). High and low current perceived stress is associated with enhanced emotional mnemonic discrimination. *Learning & Memory*.
8. Morales-Calva, F.\*\* & **Leal, S.L.** (2024). Emotional Modulation of Memorability in Mnemonic Discrimination. *Neurobiology of Learning and Memory*, 107904.
9. Hayes, B. K.\*, Harikumar, A., Ferguson, L. A.\*\*, Dicker, E. E.\*\*, Denny, B., & **Leal, S. L.** (2023). Emotion regulation during encoding reduces negative and enhances neutral mnemonic discrimination in individuals with depressive symptoms. *Neurobiology of Learning and Memory*, 205, 107824.

10. Mannion, R.<sup>#</sup>, Harikumar, A., Morales-Calva, F.<sup>\*\*</sup>, & **Leal, S. L.** (2023). A novel face-name mnemonic discrimination task with naturalistic stimuli. *Neuropsychologia*, 189 (10), 108678.
11. Phillips, T.<sup>\*</sup>, Castro, M.<sup>\*\*</sup>, Vas, R.<sup>\*</sup>, Ferguson, L. A.<sup>\*\*</sup>, Harikumar, A., & **Leal, S. L.** (2023). Perceived antidepressant efficacy associated with reduced negative and enhanced neutral mnemonic discrimination. *Frontiers in Human Neuroscience*, 17:1225836.
12. Petersen, C. M., DeLucia, P. R., Oswald, F. L., Kortum, P., **Leal, S.L.**, Pickens, S., & Hekel, B. (2023). Toward user-centered assistive technologies for aging in place with cognitive impairment: A survey. *Disability and Rehabilitation: Assistive Technology*.
13. Ferguson, L.<sup>\*\*</sup> & **Leal, S.L.** (2023). Neurobiology: basic concepts & disease implications. Invited book chapter contribution in *Mental Health in Lifestyle Medicine*.
14. Tipirneni, S.<sup>`</sup>, & **Leal, S.L.** (2023). Deciphering Facial Expressions: factors that affect emotion recognition. *Journal of Student Research*, 11(1).
15. Wu-Chung, E.L., **Leal, S.L.**, Denny, B.T., Cheng, S.L., Fagundes C.P. (2022). Spousal caregiving, widowhood, and cognition: A systematic review and a biopsychosocial framework for understanding the relationship between interpersonal losses and dementia risk in older adulthood. *Neuroscience & Biobehavioral Reviews*. 134, 104487.
16. Ferguson, L.A.<sup>\*\*</sup> & **Leal, S.L.** (2022). Interactions of Emotion and Memory in the Aging Brain: Neural and Psychological Correlates. *Curr Behav Neurosci Rep.* 9, 47-57.
17. Granger, S., **Leal, S.L.**, Larson, M.S., Janecek, J., McMillan, L., Stern, H., & Yassa, M.A. (2021). Integrity of the Uncinate Fasciculus is Associated with Emotional Pattern Separation-Related fMRI Signals in the Hippocampal Dentate and CA3, *Neurobiology of Learning & Memory*, 177, 107359.
18. **Leal, S.L.**, Ferguson, L.A.<sup>\*\*</sup>, Harrison, T.M., & Jagust, W.J. (2019). Development of a mnemonic discrimination task using naturalistic stimuli with applications to aging and preclinical Alzheimer's disease, *Learning & Memory*, 26(7), 219-228.
19. **Leal, S.L.** & Yassa, M.Y. (2019). Normal Cognitive and Brain Aging. *Oxford Handbooks on Aging*. Oxford University Press.
20. **Leal, S.L.**, Cunningham, T.J., Wirth, M., Yassa, M.A., & Payne, J.D. (2018). Post-encoding stress enhances mnemonic discrimination of negative stimuli. *Learning & Memory*, 25(12): 611-619.
21. **Leal, S.L.**, Lockhart, S.N, Maass, A., Bell, R.K., Jagust, W.J. (2018). Subthreshold amyloid predicts tau deposition in aging. *The Journal of Neuroscience*, 38(19): 4482-4489.
22. **Leal, S.L.** & Yassa, M.Y. (2018). Integrating new findings and examining clinical applications of pattern separation. *Nature Neuroscience*, 21(2):163-173.
23. **Leal, S.L.**, Landau, S.M., Bell, R.K., & Jagust, W.J. (2017). Hippocampal activation is associated with longitudinal amyloid accumulation and cognitive decline. *eLife*, 6:e22978.
24. **Leal, S.L.**, Noche, J.A., Murray, E.A., Yassa, M.A. (2017). Disruption of amygdala-entorhinal-hippocampal network in late-life depression. *Hippocampus*, 27(4):464-476.
25. Anderson, B.A., Chiu, M., DiBartolo, M.M., & **Leal, S.L.** (2017). On the distinction between value-driven attention and selection history: evidence from individuals with depressive symptoms. *Psychonomic Bulletin & Review*, 24(5):1-7.
26. Zheng, J., Anderson, K.L., **Leal, S.L.**, Shestyuk, A., Gulsen, G., Vadera, S., Mnatsakanyan, L., Hsu, F.P.K., Yassa, M.A., Knight, R.T., & Lin, J.J. (2017). Amygdala-Hippocampal Dynamics During Fearful Face Processing. *Nature Communications*.
27. **Leal, S.L.**, Noche, J.A., Murray, E.A., Yassa, M.A. (2016) Age-related individual variability in memory performance is associated with amygdala-hippocampal circuit function and emotional pattern separation. *Neurobiology of Aging*. 49, 9-19.
28. **Leal, S.L.**, Noche, J.A., Murray, E.A., Yassa, M.A. (2016). Positivity effect specific to older adults with subclinical memory impairment. *Learning & Memory*, 23(8), 415-421.
29. Reagh, Z.M., Ho, H.D., Noche, J.A., Chun, A., **Leal, S.L.**, Murray, E.A., & Yassa, M.A. (2016). Greater loss of object than spatial mnemonic discrimination in aged adults. *Hippocampus*, 26(4), 417-422.
30. **Leal, S.L.**, Yassa, M. (2015). Neurocognitive Aging and the Hippocampus Across Species. *Trends in Neuroscience*. 38(12), 800-812.
31. **Leal, S.L.**, Yassa, M. (2015). Chapter 2: The aging hippocampus: a cross species examination. *Preservation of Memory*. Psychology Press (Taylor and Francis).
32. **Leal, S.L.**, Yassa, M.A. (2014). Effects of aging on mnemonic discrimination of emotional information. *Behavioral Neuroscience*, 128(5), 539-547.

33. Anderson, B.A., **Leal, S.L.**, Hall, M.G., Yassa, M.A., Yantis, S. (2014). The attribution of value-based attentional priority in individuals with depressive symptoms. *Cognitive, Affective, and Behavioral Neuroscience*, 14(4), 1221-1227.
34. **Leal, S.L.**, Tighe, S.K., Jones, Craig K., Yassa, M.A. (2014). Pattern separation of emotional information in hippocampal dentate/CA3. *Hippocampus*. 24: 1146-1155.
35. **Leal, S.L.**, Tighe, S.K., & Yassa, M.A. (2014). Asymmetric effects of emotion on mnemonic interference. *Neurobiology of Learning & Memory*. 111: 41-48.
36. **Leal, S.L.**, Yassa, M.A. (2013) Perturbations of Neural Circuitry in Aging, Mild Cognitive Impairment, and Alzheimer's Disease. *Ageing Research Reviews*. 12(3): 823-831.

#### Under Review:

\* = undergraduate trainee

\*\* = graduate trainee

#NSF REU trainee

1. Brandao, B.M.\*\*, Castro, M.\*\*, Buegler, J.B.\*, Clark, K.R.\*\*, Denny, B.K., & **Leal, S.L.** (*under review*). Women using hormonal contraceptives show differential responses in emotional reactivity, emotion regulation success, and emotional memory compared to naturally cycling women
2. Morales-Calva, F.\*\*, Velgekar, A.\*, Sekili, M.\*, & **Leal, S.L.** (*under revision*). Image memorability depends on interference in memory.
3. Dicker, E., Chang, V., Andris, T., **Leal, S.L.**, & Denny, B.T. (*under review*). An Examination of Synergistic Strategy Selection During Daily Emotion Polyregulation.
4. Wu-Chung, E.L., Kennedy, K.M., Medina, L.D., Schulz, P.E., Oswald, F.L., Heijnen, C.J., **Leal, S.L.**, Denny, B.T., Fagundes, C.P. (*under review*). Depressive symptoms and cognitive function in early widowhood: The moderating role of cortical thickness and low-grade inflammation. Submitted to *Brain, Behavior, and Immunity*.

#### POSTERS

\* = undergraduate trainee \*\* = graduate trainee & = postdoctoral fellow ~high-school trainee #NSF REU trainee

1. Khalil, H., Turner, C., Murphy-Weinberg, V., Onica, A., Li, F., Dai, B., Stack, C., **Leal, S.L.**, Michel, C., Miller, J., Chang, W., Hen, R., Lopez, J., Watson, S.J., Akil, H. (2025). Understanding the interplay between mood, acute social stress and cognitive performance in college freshmen. *Society for Neuroscience Conference*.
2. Chavez, G.\*, Morales-Calva, F.\*\*, Velgekar, A.\*, Polanco, B.\*, & **Leal, S.L.** (2025). Stress Across Cultures: The Cognitive Impact in the Latinx Community. *Social Sciences Undergraduate Research Symposium, Rice University*. \*Chavez won Best Research Methodology
3. Lucid, M.\*, Morales-Calva, F.\*\*, Castro, M.\*\*, Ajayan, A.\*, **Leal, S.L.** (2025). The Effects of Depression on Emotional Memory. *Rice University Social Sciences Undergraduate Research Symposium*.
4. Ajayan, A.\*, Castro, M.\*\*, Morales-Calva, F.\*\*, Lucid, M.\*, **Leal, S.L.** (2025). The Impact of Gender and Anxiety on Emotional Memory. *Social Sciences Undergraduate Research Symposium, Rice University*. \*Ajahan, A. won Best Overall Poster
5. Morales-Calva, F., Nuñez-Goya, T., Leal, S.L. (2025). Cultural Influences on Memory Performance across Latinos and Non-Latinos. *American Psychological Society Conference*.
6. Clark, K.R.\*\*, Buegler, J. B.\*, Bolanos, G.C.\*, Bannis, C.\*, Lam, A.\*, & **Leal, S.L.** (2024). Post-Encoding Music Differentially Impacts General and Detailed Memory. *30<sup>th</sup> Annual UTHHealth Neuroscience Poster Session*. \*Won first place for poster presentation
7. Ballard, H.K.®, Castro, M.\*\*, Ferguson, L.\*\*, Nair, A.\*, Bailey, A.\*, & **Leal, S.L.** (2024). Relationships between estrogen, menopause, and genetic risk for Alzheimer's disease in the frame of neural network dynamics and emotional memory performance – A cross-sectional study in human females. *Society for Behavioral Neuroendocrinology (SBN) Conference*.
8. Ballard, H.K.®, Castro, M.\*\*, Ferguson, L.\*\*, Nair, A.\*, Bailey, A.\*, & **Leal, S.L.** (2024). Ballard, H.K.®, Castro, M.\*\*, Ferguson, L.\*\*, Nair, A.\*, Bailey, A.\*, & **Leal, S.L.** (2024). Relationships between estrogen, menopause, and genetic risk for Alzheimer's disease in the frame of neural network dynamics and emotional memory performance – A cross-sectional study in human females. *The Menopause Society 2024 Annual Meeting*.
9. Ballard, H.K.®, Ferguson, L.\*\*, & **Leal, S.L.** (2024). Sex differences in associations between sleep, memory, and Alzheimer's disease biomarkers via PET and fMRI. *Society for Neuroscience Conference, Chicago, IL*.

10. Brandao, B.\*\* , Castro, M.\*\* , Buerghler, J.\* , & Denny, B., & **Leal, S.L.** (2024). Effects of hormonal contraceptives on emotional memory and emotion regulation. *Society for Neuroscience Conference, Chicago, IL.*
11. Castro, M.\*\* , Ferguson, L.\*\* , Ballard, H.K.\* , Nair, A.\* , & **Leal, S.L.** (2024). Examination of antidepressant effects on emotional mnemonic discrimination and medial temporal lobe function. *Society for Neuroscience Conference, Chicago, IL.*
12. Clark, K.R.\*\* , Buerghler, J. B.\* , Bolanos, G.C.\* , Bannis, C.\* , Lam, A.\* , & **Leal, S.L.** (2024). Post-Encoding Music Differentially Impacts General and Detailed Memory. *Society for Neuroscience Conference, Chicago, IL.*
13. Ferguson, L.\*\* , Harikumar, A., & **Leal, S.L.** (2024). Subclinical depressive symptoms and job stress differentially impact emotional memory in working and retired older adults. *Society for Neuroscience Conference, Chicago, IL.*
14. Morales-Calva, F.\*\* , Ahuja, I\*., Polanco, B.\* , Velgekar, A.\* , Cordova, A.# , **Leal, S.L.** (2024). Cross-Cultural Differences in Emotion Perception and Memory Specificity. *Society for Neuroscience Conference, Chicago, IL.*
15. Cordova, A.# , Morales-Calva, F.\*\* , Velgekar, A.\* , Medina, M.\* , & **Leal, S.L.** (2024). The Effects of Chronic Stress on Memory Performance in Latinx Populations. *International Neuropsychological Society Conference, New Orleans.*
16. Brandao, B.\*\* , Castro, M.\*\* , Buerghler, J.\* , & Denny, B., & **Leal, S.L.** (2024). Examining connections between emotion regulation, menstrual cycle phase, and hormonal contraceptive use. *Social and Affective Neuroscience Society Conference.*
17. Morales-Calva, F.\*\* , Polanco, B.\* , Ahuja, I\*., Velgekar, A.\* , Núñez-Goya, T., **Leal, S.L.** (2024). The role of cross-cultural risk factors of Alzheimer's disease on memory. *Alzheimer's & Latino Symposium (Alzheimer's Association).*
18. Morales-Calva, F.\*\* , Polanco, B.\* , Ahuja, I\*., Velgekar, A.\* , Núñez-Goya, T., **Leal, S.L.** (2024). Investigating Differences in Memory Specificity Across Cultural Groups. *International Neuropsychological Society Conference.*
19. Brandao, B.\*\* , Castro, M.\*\* , Buerghler, J.\* , **Leal, S.L.**, & Denny, B. (2024). The role of hormonal contraceptives on emotion regulation. *The Society for Affective Science Conference.*
20. Velgekar, A.\* , Morales-Calva, F.\*\* , Sekili, M.\* , **Leal, S.L.** (2024). Development of a Memorability-Based Mnemonic Discrimination Task. *National Conference on Undergraduate Research (NCUR).*
21. Castro, M.\*\* , Phillips, T.O.\* , Vas, R.\* , Harikumar, A., Ferguson, L.\*\* , & **Leal, S.L.** (2023). Perceived antidepressant efficacy associated with reduced negative and enhanced neutral mnemonic discrimination. *29<sup>th</sup> Annual UTHealth Neuroscience Poster Session.* \*Won first place for poster presentation
22. Ferguson, L.\*\* , Jagust, W., & **Leal, S.L.** (2023). Relationship between Alzheimer's disease pathology and emotional memory using a naturalistic mnemonic discrimination task. *Houston Area Alzheimer's Association Conference.*
23. Polanco, B.\* , Morales-Calva, F.\*\* , Ahuja, I.\* , & **Leal, S.L.** (2023). Investigating differences in perceptual specificity across ethnic and cultural groups. *OURI Rice Summer Symposium.*
24. Clark, K.R.\*\* , Bolanos, G.C.\* , Buerghler, J. B.\* , Bannis, C.\* , & **Leal, S.L.** (2023). Post-encoding music administration during a mnemonic discrimination task. *2023 International Conference on Learning and Memory.*
25. Castro, M.\*\* , Hayes, B.K.\* , Phillips, T.O.\* , Vas, R.\* , Harikumar, A., Ferguson, L.\*\* , & **Leal, S.L.** (2023). Multiple approaches towards the modulation of emotional memory in depression. *2023 International Conference on Learning and Memory.*
26. Sekili, M.\* , Morales-Calva, F.\*\* , Velgekar, A.\* , & **Leal, S.L.** (2023). Resilience of memorability in mnemonic discrimination and attention. *Rice Undergraduate Neuroscience Symposium (RUNS).* \*3<sup>rd</sup> place in poster competition
27. Morales-Calva, F.\*\* , Sekili, M.\* , Velgekar, A.\* , & **Leal, S.L.** (2022). Effects of image memorability on episodic mnemonic discrimination. *UT Health 28th Annual Neuroscience Poster Session.* \*Won first place for poster presentation
28. Clark, K.R.\*\* , Bolanos, G.C.\* , & **Leal, S.L.** (2022). Post-Encoding Music Effects on Mnemonic Discrimination. *UT Health 28th Annual Neuroscience Poster Session.*



29. Castro, M.\*\* , Hayes, B.K.\* , Phillips, T.O.\* , Vas, R.\* , Harikumar, A., Ferguson, L.\*\* , & **Leal, S.L.** (2022). Multiple approaches towards the modulation of emotional memory in depression. *UT Health 28th Annual Neuroscience Poster Session*.
30. Morales-Calva, F.\*\* , Sekili, M.\* , Velgekar, A.\* , & **Leal, S.L.** (2022). Effects of image memorability on episodic mnemonic discrimination. *Society for Neuroscience Conference, San Diego, CA*. \*Received a Trainee Professional Development Award
31. Clark, K.R.\*\* , Bolanos, G.C.\* , & **Leal, S.L.** (2022). Post-Encoding Music Effects on Mnemonic Discrimination. *Society for Neuroscience Conference, San Diego, CA*.
32. Ferguson, L.A.\*\* , Bannis, C.M.\* , Jagust, W., **Leal, S.L.** (2022). Neural correlates of a naturalistic mnemonic discrimination task with implications for Alzheimer's disease. *Society for Neuroscience Conference, San Diego, CA*. \*Received a Trainee Professional Development Award
33. Castro, M.\*\* , Hayes, B.K.\* , Phillips, T.O.\* , Vas, R.\* , Harikumar, A., Ferguson, L.\*\* , & **Leal, S.L.** (2022). Multiple approaches towards the modulation of emotional memory in depression. *Society for Neuroscience Conference, San Diego, CA*.
34. Mannion, R.# , Harikumar, A., **Leal, S.L.** (2022). Development of a novel and naturalistic face-name mnemonic discrimination task. *Society for Neuroscience Conference, San Diego, CA*.
35. Bannis, C.M.\* , Ferguson, L.A.\*\* , Clark, K.\*\* , & Leal, S.L. (2022). The effect of amyloid and tau pathology on emotional mnemonic discrimination in cognitively normal older adults. \*Bannis won master in poster presentations
36. Mannion, R.# , Pena, A.\* , Harikumar, A., **Leal, S.L.** (2022). Development of a face-name mnemonic discrimination task. *NEURON Conference*. Quinnipiac University, North Haven, CT.
37. Vas, R.\* , Phillips, T.\* , Ferguson, L.\*\* , Harikumar, A., **Leal, S.L.** (2022). The Effect of Current Perceived Stress on Emotional Mnemonic Discrimination. *Rice Undergraduate Research Symposium*. Houston, TX.
38. Tipirneni, S.~ & **Leal, S.L.** (2022).The Effect of Emotion Recognition on Memory Recollection with Comparison of Human Emotion Recognition and Machine Learning. *Science and Engineering Fair of Houston*. Received Honorable Mention (4th place) and The Smiti Gandhi Research Star Award.
39. Tipirneni, S.~ & **Leal, S.L.** (2022). ~ The Effect of Emotion Recognition on Memory Recollection with Comparison of Human Emotion Recognition and Machine Learning. *Galveston County Science and Engineering Fair*. Received 1st place in Behavioral Sciences and 1st place overall (9th grade division).
40. Peterson, C., DeLucia, P., Oswald, F., Kortum, P., **Leal, S.**, Pickens, S., Hekel, S. (2022). Aging in Place with Cognitive Impairment: Toward User-Centered Assistive Technologies. *HFES 66th International Annual Meeting*.
41. Ferguson, L.\*\* , Harikumar, A., **Leal, S.L.** (2022). The effect of retirement on emotional mnemonic discrimination. *Cognitive Aging Conference*, Atlanta, GA.
42. Ferguson, L.\*\* , Harikumar, A., **Leal, S.L.** (2022). The effect of retirement on emotional mnemonic discrimination. *Dallas Aging and Cognition Conference (virtual poster)*.
43. Ferguson, L.\*\* , Harikumar, A.\* , **Leal, S.L.** (2021). The effect of retirement on emotional mnemonic discrimination. *UT Health 27th Annual Neuroscience Poster Session*. \*Won first place for poster presentation
44. Vas, R.\* , Phillips, T.O.\* , Harikumar, A., Ferguson, L.\*\* , **Leal, S.L.** (2021). The effect of current perceived stress on emotional mnemonic discrimination. *UT Health 27th Annual Neuroscience Poster Session*.
45. Dicker, E.\*\* , **Leal, S.L.**, Fagundes, C., Denny, B. (2021). Exploring the interaction between emotion regulation and inflammation on changes in episodic memory in older adults. *Society for Neuroscience*.
46. Ferguson, L.\*\* , Harikumar, A., **Leal, S.L.** (2021). Examining the effect of retirement and cognitive activity on mnemonic discrimination. *Society for Neuroscience*.
47. Hayes, B.\* , Harikumar, A., Ferguson, L.\*\* , **Leal, S.L.** (2021). The effect of emotion regulation on negative affect and emotional mnemonic discrimination. *Society for Neuroscience*.
48. Mannion, R.# , Pena, A.\* , Harikumar, A., **Leal, S.L.** (2021). Development of a face-name mnemonic discrimination task. *Society for Neuroscience*.
49. Phillips, T.O.\* , Vas, R.\* , Harikumar, A., Ferguson, L.\*\* , **Leal, S.L.** (2021). The effect of antidepressants on emotional mnemonic discrimination. *Society for Neuroscience*.
50. Vas, R.\* , Phillips, T.O.\* , Harikumar, A., Ferguson, L.\*\* , **Leal, S.L.** (2021). The effect of current perceived stress on emotional mnemonic discrimination. *Society for Neuroscience*.



51. Ferguson, L.\*\* , **Leal, S.L.**, Jagust, W.J. (2019). Regional distribution of longitudinal amyloid accumulation in cognitively normal older adults. *Society for Neuroscience*.
52. Ferguson, L.\*\* , **Leal, S.L.**, Jagust, W.J. (2018). Using dynamic, contextually rich video stimuli as a more ecologically valid test of remembering and forgetting. *Society for Neuroscience*.
53. Granger, S., **Leal, S.L.**, Murray, E.A, Yassa, M.A. (2018). Structural integrity deficits of uncinate fasciculus predict medial temporal lobe activity during an emotional pattern separation task. *Society for Neuroscience*.
54. Granger, S., **Leal, S.L.**, Murray, E.A, Yassa, M.A. (2018). Structural integrity deficits in the uncinated fasciculus predict medial temporal lobe subfield activity during an emotional pattern separation task. *Cognitive Neuroscience Society*.
55. **Leal, S.L.**, Landau, S.M., Bell, R.K., & Jagust, W.J. (2017). Hippocampal activation is associated with longitudinal amyloid accumulation and cognitive decline. *Human Amyloid Imaging Conference*.
56. Zheng, J., Stevenson, R.F., Harriger, L.D., **Leal, S.L.**, Vadera, S., Yassa, M.A., & Lin, J.J. (2017). Depth electrode recording of the amygdala-hippocampal network during mnemonic discrimination of emotional scenes. *Cognitive Neuroscience Society*.
57. Stevenson, R.F., Zheng, J., **Leal, S.L.**, Chun, A.P., Vadera, S., Knight, R.T., Lin, J.J., & Yassa, M.A. (2016). High-frequency band activity in human hippocampal CA1 predicts the precision of spatial memory retrieval. *Society for Neuroscience*.
58. **Leal, S.L.**, Cunningham, T.J., Wirth, M., Yassa, M.A., & Payne, J.D. (2016). Stress enhances mnemonic discrimination of negative objects. *Cognitive Neuroscience Society*.
59. **Leal, S.L.**, Noche, J.A., Murray, E.A., & Yassa, M.A. (2015). High-resolution fMRI of hippocampal-amygdala dynamics during emotional memory discrimination in healthy aging and late-life depression. *Society for Neuroscience*.
60. Yassa, M.A., Stevenson, R.F., **Leal, S.L.**, Zheng, J., Roberts, J., Riley, J., Murray, E.A., & Lin, J.J. (2015). Intracranial EEG of hippocampal-amygdala dynamics during emotional memory discrimination. *Society for Neuroscience*.
61. Noche, J.A., **Leal, S.L.**, Murray, E.A., Yassa, M.A. (2015). Remembering emotional gist and detail information: individual differences in age-related memory loss. *Society for Neuroscience*.
62. Noche, J., **Leal, S.L.**, Yassa, M.Y. (2015). Age-related changes in emotional memory and forgetting: gist vs. detail. *2015 ICTS Translational Research Day*.
63. **Leal, S.**, Yassa, M. (2015). Effects of aging on mnemonic discrimination of emotional information. *ReMIND 6<sup>th</sup> Annual Emerging Scientists Symposium*.
64. **Leal, S.**, Yassa, M. (2014). Effects of aging on mnemonic discrimination of emotional information. *Society for Neuroscience*.
65. Carlos, K., **Leal, S.**, Roberts, J., Yassa, M. (2014). The effect of reward on discrimination in a visual pattern separation task. *UCI MSTP Retreat, Lake Arrowhead*.
66. Anderson, B. A., **Leal, S. L.**, Hall, M. G., Yassa, M. A., & Yantis, S. (2014). *The attribution of value-based attentional priority in individuals with depressive symptoms*. Paper presented at the annual Object Perception, Attention, and Memory (OPAM) conference, Long Beach, CA.
67. Partow, C., **Leal, S.L.**, & Yassa, M. (2014). The Relationship Between Sleep Hours, Emotional Memory, and Neurophysiological Response. *JHU PURA Recognition Ceremony*.
68. **Leal, S.L.**, Tighe, S.K., Jones, C.K, Yassa, M.A. (2013). High-resolution fMRI Reveals Amygdala and Hippocampal Dentate/CA3 Dynamics During Emotional Pattern Separation. *Society for Neuroscience*.
69. Tighe, S., **Leal, S.L.**, Stark, S.M., Stark, C.E., Yassa, M.A. (2013). Resting State fMRI Functional Connectivity in Individuals with Mild Cognitive Impairment. *International Neuropsychological Society*.
70. **Leal, S.**, Tighe, S., Stark, S.M., Stark, C.E., Yassa, M.A. (2013). Age-related alterations in intrinsic functional connectivity networks measured with resting state fMRI. *International Neuropsychological Society*.
71. **Leal, S.L.**, McNary, G., Levitt, E., & Yassa, M.A. (2012). A dual role for amygdala-mediated emotional modulation of hippocampal pattern separation. *Society for Neuroscience*.
72. Yassa, M.A., **Leal, S.L.**, McNary, G., & Levitt, E. (2012). Pattern separation of negative emotional stimuli is enhanced in depressed adults. *Society for Neuroscience*.
73. Tighe, S., **Leal, S.L.**, Stark, S., Stark, C., Lyketsos, C., & Yassa, M. (2012). Anterior cingulate connectivity in depressed, cognitively impaired older adults. *International College of Geriatric Psychoneuropharmacology*.

## **PRESENTATIONS**

1. Ferguson, L., & **Leal, S.L.** (2025). High locus coeruleus integrity associated with worse memory performance in older adults with severe transdiagnostic neuropsychiatric symptoms. *The Integrative Neuromodulatory Subcortical Systems (INSS) 2025 Meeting*.
2. Buerghler, J.\*, Brandao, B.\*\*, Castro, M.\*\*, & Denny, B., & **Leal, S.L.** (2025). Emotion Regulation Strategies During Encoding Differentially Impact Affect and Memory. *Social Sciences Undergraduate Research Symposium, Rice University*. \*Buerghler won Best Research Findings - Oral Presentation
3. Brandao, B.\*\*, Castro, M.\*\*, Buerghler, J.\*, & Denny, B., & **Leal, S.L.** (2025). Effects of hormonal contraceptives on emotion regulation and emotional reactivity. *Society for Affective Science Conference, Portland, OR*.
4. Wu-Chung, E.L., Kennedy, K.M., Medina, L.D., Schulz, P.E., Oswald, F.L., Heijnen, C.J., **Leal, S.L.**, Denny, B.T., Fagundes, C.P. (2025). Psychological distress and cognitive function: The moderating role of inflammation and cortical grey matter [Oral paper presentation]. *Society for Biopsychosocial Science & Medicine 82th Annual Scientific Meeting. Seattle, WA, USA*.
5. **Leal, S.L.** (2024). The Aging Brain: Can we prevent memory decline and AD? *The Village of Tanglewood (Senior Living Community)*.
6. Chang, W., Samuels, B., Jagasia, R., Etkin, A., **Leal, S.L.**, Miller, J., Tegang, K., Chung, H., Hartmann, J., Michel, C., Ressler, K., Keilp, J., Stucke, C., Savitz, A., Saxe, M., Wichmann, J., David, I.M., David, D., & Hen, R. (2024). Targeting adult hippocampal neurogenesis and pattern separation for novel therapeutic development. *Neurogenesis Conference, Cancun, Mexico*.
7. **Leal, S.L.** (2023). Colloquium on the Brain: Crafting Strategies to Advance Brain Health, Brain Performance and Brain Capital Policies (Panelist: Articulating Supportive Policies). *Baker Institute for Public Policy at Rice University*.
8. **Leal, S.L.** (2023). The Aging Brain: Can we prevent memory decline and AD? *The Village of River Oaks (Senior Living Community)*.
9. **Leal, S.L.** (2023). Toward more sensitive approaches for the early detection of Alzheimer's disease. *Invited talk, Kopchick Research Symposium (Theme: Cutting-Edge Science)*
10. **Leal, S.L.** (2023). Toward more sensitive approaches for the early detection of Alzheimer's disease. *Invited talk, Great Houston Area Alzheimer's Disease Symposium*.
11. **Leal, S.L.** (2023). Identifying the cognitive and neurobiological mechanisms underlying emotional memory in health and disease. *Invited talk, Tulane University Psychology Colloquium Speaker Series*.
12. **Leal, S.L.** (2023). The Aging Brain: Can we prevent memory decline and AD? *The Village at Southampton (Senior Living Community)*.
13. **Leal, S.L.** (2023). Identifying the cognitive and neurobiological mechanisms underlying emotional memory in health and disease. *UCLA Psychology Speaker Series*.
14. **Leal, S.L.** (2023). Memory: A Neuroscientist's Study of Remembering and Forgetting. *Susanne M. Glasscock School of Continuing Studies: Midweek Medley*.
15. **Leal, S.L.** (2022). Toward more sensitive approaches for the early detection of Alzheimer's disease. *UCLA Dementia Colloquium Series*.
16. **Leal, S.L.** (2022). The Aging Brain: Can we prevent memory decline and AD? *Thomas A. Glazier Senior Education Center*.
17. **Leal, S.L.** (2022). The emotional modulation of memory in depression, aging, and preclinical Alzheimer's disease. *Texas A&M Institute for Neuroscience (TAMIN) seminar*.
18. **Leal, S.L.** (2021). Memory in Healthy Aging and Preclinical Alzheimer's Disease. *Association of Retired Rice University Faculty Conference on "Cognitive and Brain Health in Aging"*
19. **Leal, S.L.** (2021). Making lasting memories: the neural basis of remembering significant experiences. *NSF REU lecture at Rice University*.
20. **Leal, S.L.** (2021). Emotional modulation of pattern separation: clinical applications. *Society for Applied Research in Memory and Cognition (SARMAC) Conference*.
21. **Leal, S.L.** (2021). The Aging Brain: Examining memory changes in aging and Alzheimer's disease. *Association of Retired Rice University Faculty Conference on "Why Hearing Research Matters to Longevity and Communities"*.
22. **Leal, S.L.** (2020). Making Lasting Memories: The Neural Basis of Remembering Significant Experiences. *CAMRI Seminar Series, Baylor College of Medicine*.
23. **Leal, S.L.** (2019). Core vulnerability of the medial temporal lobes: the influence of aging and depression on memory. *Rice University Cognitive & Health Tea*.

24. **Leal, S.L.** (2019). Making lasting memories: the neural basis of remembering significant experiences. *Rice University Colloquium*.
25. **Leal, S.L.** (2019). Making lasting memories: the neural basis of remembering significant experiences. *Northwestern Medicine, Mesulam Center for Cognitive Neurology and Alzheimer's Disease*.
26. **Leal, S.L.** (2019). Making lasting memories: the neural basis of remembering significant experiences. *Boston University Colloquium*.
27. **Leal, S.L.** (2018). Low levels of brain beta-amyloid predict tau deposition and memory decline in aging. *Human Amyloid Imaging Conference*.
28. **Leal, S.L.** (2017). Early accumulation of beta-amyloid drives tau deposition and memory decline in preclinical Alzheimer's disease. *Society for Neuroscience Conference*.
29. **Leal, S.L.** (2017). Hippocampal activation is associated with longitudinal amyloid accumulation and cognitive decline. *Dallas Aging & Cognition Conference*.
30. **Leal, S.L.** (2017). Hippocampal activation is associated with longitudinal amyloid accumulation and cognitive decline. Datablitz presented at the *Winter Conference for Neurobiology of Learning & Memory, Park City, UT*.
31. **Leal, S.L.** (2016). fMRI of hippocampal/amygdala interactions during memory performance in aging and depression in late life. *T32 Training Grant Presentation*.
32. **Leal, S.L.** (2015). fMRI of hippocampal/amygdala interactions and memory performance in depression and aging. *JHU Dementia Consortium Conference*.
33. **Leal, S.L.** (2014). Emotional modulation of memory in depression and cognitive aging. *UCI NeuroBlitz*.
34. **Leal, S.L.** (2014). Emotional modulation of memory: Alterations in the medial temporal lobe. *UCI NeuroBlitz*.
35. **Leal, S.L.** (2014). Emotional modulation of memory: Alterations in the medial temporal lobe. *Psychological & Brain Sciences Seminar*.
36. **Leal, S.L.** (2013). Pattern separation of emotional information. *Psychological & Brain Sciences Biopsychology Area Seminar*.
37. **Leal, S.L.** (2013). Amygdala-mediated emotional modulation of hippocampal pattern separation. *Psychological & Brain Sciences Seminar*.
38. **Leal, S.L.** (2013). Amygdala-mediated emotional modulation of hippocampal pattern separation. Datablitz presented at the *Winter Conference for Neurobiology of Learning & Memory, Park City, UT*.
39. **Leal, S.L.** (2012). Amygdala-mediated emotional modulation of hippocampal memory. *Psychological & Brain Sciences Biopsychology Area Seminar*.
40. **Leal, S.L.** (2012). Emotional modulation of hippocampal memory. *Psychological & Brain Sciences Cognitive Area Seminar*.
41. **Leal, S.L.** (2011). Emotional modulation of hippocampal memory in healthy and depressed adults. *Psychological & Brain Sciences Seminar*.

## **CHAired SYMPOSIA**

Leal, S.L. (2017, November). Cognitive aging and memory. Symposium conducted at the *Society for Neuroscience* meeting. Washington, DC.

## **PROFESSIONAL ACTIVITIES**

2024 – *present*, Member, Undergraduate Neuroscience Interdepartmental Graduate Program (uNSIDP) Curriculum/Executive Committee, UCLA

2024 – *present*, Member, Neuroscience Interdepartmental Graduate Program (NSIDP), UCLA

2024 – *present*, Fellow of the UC Irvine Center for the Neurobiology of Learning and Memory (CNLM)

2024 – *present*, Member, Memory Disorders Research Society (MDRS)

2024 – *present*, Member, US Consortium of Aging, Dementia and Latino Studies

2023 – *present*, Member of the Editorial Board, *Nature Scientific Reports*

2023 – *present*, Guest Editor, Cognitive, Affective, & Behavioral Neuroscience (Special Issue on “*Individual Differences in Memory Modulation: Factors Influencing the Neurobiology of Learning and Memory*”)

2023 – *present*, Guest Editor, Collection on Mental Health and Illness in Older Adults (*Scientific Reports*)

2022 - 2023, NIMH K99/R00 Review Panel (2022-2023)

NIH Brain Disorders and Related Neurosciences Fellowship Study Section (F01A)

Review Editor, *Frontiers of Aging Neuroscience* (Neurocognitive Aging and Behavior)

Guest Associate Editor, Frontiers in Human Neuroscience (Measures & Modulation of Brain Function for Symptom Management) (2020-2022)

NIH Study Section (Clinical Neuroscience & Neurodegeneration) (2019)

Reviewer:

Acta Psychology  
Aging, Neuropsychology, & Cognition  
Alzheimer's & Dementia  
Annals of Neurology  
Attention, Perception, & Psychophysics  
Behavioral Neuroscience  
Behavioral Brain Research  
Brain & Behavior  
Cognitive Neuroscience  
Cognitive, Affective, & Behavioral Neuroscience  
Frontiers in Psychology  
Hippocampus  
Human Brain Mapping

Journal of Neuroscience  
Learning & Memory  
Memory & Cognition  
Nature Communications  
Nature Neuroscience  
Neurobiology of Aging  
Neurobiology of Stress  
Neuroimage  
Neurology  
Neuron  
Psychoneuroendocrinology  
Psychology & Aging  
The American Journal of Geriatric Psychiatry

**TEACHING**

\* = developed new course

**Rice University**

Spring 2024 Psychology of Aging (Glasscock School of Continuing Studies)  
Spring 2024 PSYC 487/587: Functional Neuroanatomy  
Spring 2024 PSYC 310: Psychology of Aging  
Fall 2023 PSYC 308: Memory  
Spring 2023 PSYC 524: Memory (Graduate Core Course)\*  
Spring 2023 PSYC 310: Psychology of Aging  
Fall 2022 Guest Lecture, Long-Term Memory, Foundations of Cognitive Neuroscience  
Fall 2022 PSYC 308: Memory  
Spring 2022 PSYC 308: Memory  
Spring 2022 PSYC 310: Psychology of Aging  
Fall 2021 PSYC 487/587: Functional Neuroanatomy\*  
Fall 2021 Guest Lecture, Episodic Memory, Advanced Cognitive Neuroscience: Higher Mental Functions  
Fall 2020 PSYC 308: Memory\*  
Fall 2020 Guest Lecture, Long-Term Memory, Foundations of Cognitive Neuroscience  
Spring 2020 PSYC 310: Psychology of Aging\*  
Fall 2019 Guest Lecture, Episodic Memory, Advanced Cognitive Neuroscience: Higher Mental Functions

**University of California, Berkeley**

Fall 2017 Guest Lecture, Memory and the Aging Brain, Cognitive Neuroscience

**Johns Hopkins University**

Spring 2014 Teaching Assistant, Foundations of Mind, Dr. Lisa Feigenson  
Spring 2013 Guest Lecture, Emotion and Fear, Neurobiology of Learning and Memory  
Spring 2013 Guest Lecture, False Memory, Neurobiology of Learning and Memory  
Spring 2013 Teaching Assistant, Psychology of Aging, Dr. Michela Gallagher  
Fall 2012 Teaching Assistant, Psychopharmacology, Dr. Linda Gorman  
Spring 2012 Teaching Assistant, Functional Human Neuroanatomy, Dr. Susan Courtney

**DEPARTMENTAL AND UNIVERSITY SERVICE**

2025, Member of the uNSIDP Lecturer Search Committee  
2023 - 2024, Faculty Sponsor, *Perfect Pair* (organization forming intergenerational connections between college students and older adults)  
2023 - 2024, Member of the Applied Psychology Faculty Search Committee  
2022 - 2024, Co-Chair of the Diversity, Equity, and Inclusion Committee (Psychological Sciences)  
2021 - 2024, Member of the Neuroscience Undergraduate Curriculum Committee  
2021 - 2024, Cognitive, Health, & Affective Tea (CHAT) Coordinator

2020 - 2022, **Member of University Committee on Fellowships and Awards**  
2021 - 2022, **Cognitive & Affective Neuroscience Faculty Search Committee**  
2021 - 2022, **Psychological Sciences Lecturer Search Committee**  
2011 - 2014, **TA Committee for Psychological & Brain Sciences Department**  
2013 - 2014, **Colloquium Committee for Psychological & Brain Sciences Department**  
2012 - 2014, **Active Minds, President and Founder of Active Minds on the JHU campus**  
2012 - 2014, **JHU Counseling Center Advisory Board**  
2009 - 2011, **American Medical Student Association, Vice-President & Co-Founder on the UCSB campus**

### **OUTREACH INVOLVEMENT**

2020 - 2024, **Member, Alzheimer's Association Care & Support Committee**  
2019 - 2024, **Annual Walk to End Alzheimer's, Alzheimer's Association (Rice University Psychological Sciences Team)**

#### **The 2024 Leal Lab Lecture Series at *The Village of Tanglewood (Senior Living Community)***

**Leal, S.L.** (2024). The Aging Brain: Can we prevent memory decline and AD?  
**Ballard, H.** (2024). Women's Health across adulthood (Postdoctoral fellow)  
**Ferguson, L.** (2024). Mental Health in Aging (Graduate student)

#### **The 2023 Leal Lab Lecture Series at *The Village of River Oaks (Senior Living Community)***

**Leal, S.L.** (2023). The Aging Brain: Can we prevent memory decline and AD?  
**Ballard, H.** (2023). Women's Health across adulthood (Postdoctoral fellow)  
**Ferguson, L.** (2023). Mental Health in Aging (Graduate student)

#### **The 2023 Leal Lab Lecture Series at *The Village of Southampton (Senior Living Community)***

**Leal, S.L.** (2023). The Aging Brain: Can we prevent memory decline and AD?  
**Ballard, H.** (2023). Women's Health across adulthood (Postdoctoral fellow)  
**Ferguson, L.** (2023). Mental Health in Aging (Graduate student)

**Leal, S.L.** (2023). Memory: A Neuroscientist's Study of Remembering and Forgetting. *Susanne M. Glasscock School of Continuing Studies: Midweek Medley.*

**Leal, S.L.** (2022). The Aging Brain: Can we prevent memory decline and AD? *Thomas A. Glazier Senior Education Center.*

**Leal, S.L.** (2021). Memory in Healthy Aging and Preclinical Alzheimer's Disease. *Association of Retired Rice University Faculty Conference on "Cognitive and Brain Health in Aging"*

**Leal, S.L.** (2021). The Aging Brain: Examining memory changes in aging and Alzheimer's disease. *Association of Retired Rice University Faculty Conference on "Why Hearing Research Matters to Longevity and Communities"*.

### **MENTORSHIP**

\*=award/funding

#### **Postdoctoral Mentor:**

Hannah Ballard (2022 - 2025) – Starting as Researcher at Rice University Kinder Institute in March 2025

\*Rice University Academy Fellowship (2022-2024)

\*NRSA F32 (2023-2026)

#### **Primary Graduate Mentor:**

Lorena Ferguson (2020 - *present*)

\*SSRI Pre-Dissertation Award (2022-2023)

\*Trainee Professional Development Award (2022, Society for Neuroscience)

\*SSRI Graduate Student Conference Travel Grant (2023, LEARNMEM)

\*Student Travel Fellowship (2024 Aspen Aging & Brain Health Conference)

\*2023 Laughery Award for Best Master's Thesis

\*SSRI Dissertation Improvement Grant (2024-2025)

Kayla Clark (2021 - *present*)

- \*SSRI Graduate Student Conference Travel Grant (2022, Society for Neuroscience)
- \*SSRI Pre-Dissertation Award (2024-2025)
- \*2024 Laughery Award for Best Master's Thesis
- \*SSRI Dissertation Improvement Grant (2025-2026)

Fernanda Morales-Calva (2021 – *present*)

- \*Fulbright Scholar (2021-2024)
- \*SSRI Graduate Student Conference Travel Grant (2022 Society for Neuroscience)
- \*Trainee Professional Development Award (2022 Society for Neuroscience)
- \*SSRI Pre-Dissertation Award (2023-2024)
- \*LEARNMEM NIH Travel Fellowship (2023 International Conference on Learning and Memory)
- \*2023 Diversity Grant of the Psychological Science Research Grant (APAGS)
- \*Full Conference Fellowship (2024 4th Latinos & Alzheimer's Symposium)
- \*James T. Wagoner '29 Foreign Study Scholarship (2024)
- \*2024-2025 Expanding Horizons Fellowship
- \*2024 Laughery Award for Best Master's Thesis
- \*Trainee Professional Development Award (2024 Society for Neuroscience)
- \*2025 Excellence in Research, Teaching, and Service Award (Psychological Sciences)

Madelyn Castro (2022 - *present*)

- \*Graduate Studies Dean's Fellowship (2022)
- \*NSF GRFP (2022-2025)
- \*SSRI Graduate Student Conference Travel Grant (2022, Society for Neuroscience)
- \*2025 Laughery Award for Best Master's Thesis

#### **Co-Mentor/Master's Student Mentor:**

Beatriz Brandao (2023 - *present*, Co-Mentor with Dr. Bryan Denny)

- \*Society for Affective Science Diversity Trainee Award (2025)
- \*Welcome Initiative Award, *Society for Behavioral Endocrinology* (SBN)

Eva Dicker (2020 - 2023, Co-Mentor with Dr. Bryan Denny) – Tenure-track Assistant Professor at Seattle University in 2023

- \*NRSA F31 (*awarded*)
- \*SSRI Dissertation Research Improvement Grant (2023-2024)

Nessa Kim (2019 - 2022, Human Factors Master's Program) – Now pursuing at PhD at Rice University

#### **Undergraduate Research Mentor / Research Assistant:**

Giselle Chavez (2024 - *present*)

- \*Best Research Methodology – Poster presentation at SSURS 2025

Ashwathi Nair (2023 - 2024)

Ella Zhou (2024)

Thara Venkateswaran (2024)

Ivashi Ahuja (2023 – 2024)

Michael Tsao (2024 – *present*)

- \*Best Poster Award in Human Development, Health, Performance, & Disease at NSURS 2025

Ines Iriondo (2023 – 2024)

Victoria Nian (2024)

Ahi Ajayan (2024 – *present*)

- \*Best Overall Poster at SSRUS 2025
- \*Maurin Fellowship (Summer 2025)

Madeline Lucid (2024 – *present*)

- \*DEI SURF in PSYC Fellowship (Summer 2024)

Thomas Witherspoon (2024)

Sydney Bogan (2023)

Bryant Polanco (2023 - *present*)

- \*Maurin Fellowship (Summer 2023)
- \*Nominated for Janessa Shapiro Award
- \*2025 Gilbert L. Hermance Award Recipient

Amy Lam (2023)

Alexis Bailey (2022 - 2024) – Starting Baylor College of Medicine M.D. Program in 2023

Aditi Velgekar (2022 - *present*)

- \*Maurin Fellowship (Summer 2022)
- \*Nominated for Janessa Shapiro Award
- \*Maurin Travel Award (NCUR)
- \*OURI Conference Grant (NCUR)
- \*Gateway Travel Award (NCUR)
- \*Maurin Fellowship (Summer 2024)
- \*Distinction in Research and Creative Works

Michelle Sekili (2022 – 2024)

- \*Cognitive Science Summer Fellowship (Summer 2022)
- \*3<sup>rd</sup> place in poster competition at RUNS
- \*Nominated for Janessa Shapiro Award

Jacob Buerger (2022 - *present*)

- \*Nominated for Janessa Shapiro Award
- \*Maurin Fellowship (Summer 2023)
- \*Maurin Fellowship (Summer 2024)
- \*First Place Poster Presentation at RURS 2023
- \*Best Research Methodology - Poster Presentation at SSURS 2024
- \*Best Research Findings – Oral Presentation at SSURS 2025
- \*Distinction in Research and Creative Works

Rena Mannion (2021 – 2022)

- \*NSF REU program fellow (2021 & 2022)

Chandler Bannis (2022)

- \*Summer Undergraduate Research Fellowship
- \*Mastery of Poster Presentations (OURI 2022)

Gabriel Bolanos (2022)

Rishi Vas (2019 - 2022) – Starting Columbia Medical School Program in 2023

Brandon Hayes (2019 - 2021) – Starting UC Davis Graduate Program in 2023

Taylor Phillips (2019 - 2021) – Research Assistant at the University of Pennsylvania

Rose Click (2019 - 2020)

Ashley Pena (2019 - 2020)

### **High School Mentor:**

Sreeja Tirpirneni (2021 - 2023)

- \*Honorable Mention (4th place) at The Science & Engineering Fair of Houston
- \*The Smiti Gandhi Research Star Award at The Science & Engineering Fair of Houston
- \*1st place in Behavioral Sciences at The Galveston County Science & Engineering Fair
- \*1st place overall (9th grade division) at The Galveston County Science & Engineering Fair

### **Service on Master's Committees**

Eva Dicker, Psychological Sciences, Rice University  
 Lydia Wu, Psychological Sciences, Rice University  
 Pauline Goodson, Psychological Sciences, Rice University  
 Lorena Ferguson, Psychological Sciences, Rice University (Chair)  
 Yu Lu, Psychological Sciences, Rice University  
 Fernanda Morales-Calva, Psychological Sciences, Rice University (Chair)  
 Kayla Clark, Psychological Sciences, Rice University (Chair)  
 Madelyn Castro, Psychological Sciences, Rice University (Chair)  
 Beatriz Brandao, Psychological Sciences, Rice University  
 Ana Daniela del Río Pulido, Applied Physics, Rice University

### **Service on PhD Committees**

Eva Dicker, Psychological Sciences, Rice University  
 Osip Nikiforov, The Shepherd School of Music, Rice University  
 Lydia Chung, Psychological Sciences, Rice University  
 Lorena Ferguson, Psychological Sciences, Rice University (Chair)  
 Pauline Goodson, Psychological Sciences, Rice University  
 Fernanda Morales-Calva, Psychological Sciences, Rice University  
 Kayla Clark, Psychological Sciences, Rice University



