

Andy Jeesu Kim Ph.D.

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01. EMPLOYMENT & AFFILIATIONS

Assistant Professor in Psychological Sciences, <i>Purdue University</i>	Current
Faculty Associate, Center on Aging and the Life Course, <i>Purdue University</i>	Current

02. EDUCATION & TRAINING

Postdoctoral Scholar in Gerontology, <i>University of Southern California (USC)</i>	2026
Ph.D. in Neuroscience, <i>Texas A&M University (TAMU)</i>	2021
M.S. in Biomedical Sciences, <i>Texas A&M University</i>	2017
B.S. in Physiology & Neuroscience, <i>University of California: San Diego (UCSD)</i>	2014

03. AWARDS & HONORS

Leonard and Sophie Davis Endowed Postdoctoral Award, School of Gerontology (USC)	2025
Individual Postdoctoral National Research Service Award (F32), National Institute on Aging	2022
Postdoctoral Research Training Award (T32; USC)	2022
OGAPS Graduate Student Research Travel Award (TAMU)	2020
Object Perception, Attention, and Memory (OPAM) Conference Award	2020
Psychonomic Society's Graduate Conference Award	2020
Psychological & Brain Sciences Department Research Award (TAMU)	2019
Graduate and Professional Student Council Travel Award (TAMU)	2019
Society for Neuroscience 3 rd Place Poster Award (TAMU)	2018
William H. Stout Merit Scholarship (UCSD)	2010

04. GRANTS

External	
PI, "The effects of noradrenergic activity on age-related distractibility" - \$164,068 National Institute on Aging F32 NRSA (AG076288)	2022-2025
Internal	
PI, Center for Mindfulness Science Pilot Grant (USC) - \$1,150	2022
PI, fMRI Pilot Funding Grant (TAMU) - \$2,000	2017
PI, Fellowship Preparation Grant (TAMU) - \$5,000	2017

05. PEER-REVIEWED PUBLICATIONS

Under Review

- Kim, A. J.**, Kedia, B., Cahn, B.R., Werkle-Bergner, M., & Mather, M. (under review). Paced breathing enhances oscillatory power and attenuates distractor-evoked responses in young and older adults.
- Kim, A. J.**, Liu, Y., & Mather, M. (under review). Angry faces disrupt motion perception more than happy or neutral faces in both younger and older adults.
- Kim, A. J.**, Choi, P., Nashiro, K., Nation, D.A., & Mather, M. (under review). A multivariate voxelwise framework to characterize locus coeruleus MRI contrast and behavior relationships.
- Kim, A. J.**, Zhao, C., Guo, F., Pappas, I., Dahl, M. J., Jacobs, H. I. L., Wang, D. J. J., & Mather, M. (under review). Arousal increases locus coeruleus blood flow, salience-related brain responses, and modulates negative-valence attentional biases. Preprint: doi.org/10.1101/2025.10.07.680973
- Yoo, H. J., **Kim, A. J.**, Dahl, M., Alemu, K., Nashiro, K., Cho, C., Mercer, N., Choi, P., Lee, H. J., Min, J., Thayer, J., & Mather, M. (under review). Daily paced breathing sessions induce left orbitofrontal volume changes linked to cognitive outcomes.
- Lin, Y-H., **Kim, A. J.**, Mather, M., Yeh, Y-C., Yen, C-F., Ke, C-L. K., Liao, H-Y., Lee, K-L., & Lin, I-M. (under review). Effects of heart rate variability biofeedback and muscle relaxation on ventromedial prefrontal cortex activity in young patients with depressive disorder.

2026

Guo, F., Zhao, C., Bhatt, R. R., Liu, Z., **Kim, A. J.**, Yang, Z., Xu, S., Jann, K., Mather, M., Jahanshad, N., & Wang, D. J. J. (in press). Assessing molecular, cellular, and transcriptomic bases of laminar perfusion and cytoarchitecture coupling in the human cortex. *Nature Communications*.

Kim, A. J., Morales, S., Senior, J., & Mather, M. (2026). Electroencephalography, pupillometry, and behavioral evidence for locus coeruleus-noradrenaline system related tonic hyperactivity in older adults. *Neurobiology of Aging*, 159, 15-32.

Nashiro, K., Min, J., Yoo, H. J., Cho, C., Dahl, M. J., Choi, P., Lee, H. R. J., Choupan, J., Mercer, N., Nasser, P., **Kim, A. J.**, Alemu, K., Ng, N. F., Herrera, A. Y., Werkle-Bergner, M., Thayer, J. F., Sordo, L., Head, E., & Mather, M. (in press). Testing effects of paced breathing on $\Delta\beta$ and brain perivascular spaces. *International Journal of Psychophysiology*. Preprint: doi.org/10.64898/2026.01.08.26343624

2025

Kim, A. J., Nguyen, K., Tian, Y., & Mather, M. (2025). Eye movement evidence for locus coeruleus-noradrenaline system contributions to age differences in attention. *Psychology & Aging*, 40(8), 929-944.

Kim, A. J., Chen, K., Tian, Y., & Mather, M. (2025). The effects of mindfulness meditation on mechanisms of attentional control in young and older adults: A preregistered eye tracking study. *eNeuro*, 12(7), ENEURO.0356-23.2025.

Kim, A. J., Gregoire, L., & Anderson, B. A. (2025). Reliably measuring learning-dependent distractor suppression with eye tracking. *Behavior Research Methods*, 57, 18.

2024

Kim, A. J., Senior, J., Chu, S., & Mather, M. (2024). Aging impairs reactive attentional control but not proactive distractor inhibition. *Journal of Experimental Psychology: General*, 153(7), 1938-1959.

Nashiro, K., Yoo, H. J., Cho, C., **Kim, A. J.**, Nasser, P., Min, J., Dahl, M. J., Mercer, N., Choupan, J., Choi, P., Lee, H. R. J., Choi, D., Alemu, K., Herrera, A. Y., Ng, N. F., Thayer, J. F., & Mather, M. (2024). Heart rate and breathing effects on attention and memory (HeartBEAM): study protocol for a randomized controlled trial in older adults. *Trials*, 25(1), 1-16.

2023

Liao, M-R., **Kim, A. J.**, & Anderson, B. A. (2023). Neural correlates of value-driven spatial attention. *Psychophysiology*, 60(9), e14321.

2022

Kim, A. J.*, Lee, D. S.*, Grindell, J., & Anderson, B. A. (2022). Selection history and the strategic control of attention. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 50(2), 204-211.

*denotes equal contribution

Kim, A. J., & Anderson, B. A. (2022). Systemic effects of selection history on learned ignoring. *Psychonomic Bulletin & Review*, 29(4), 1347-1354.

Lee, D. S., **Kim, A. J.**, & Anderson, B. A. (2022). The influence of reward history on goal-directed visual search. *Attention, Perception, & Psychophysics*, 84(2), 325-331.

2021

Kim, A. J., Gregoire, L., & Anderson, B. A. (2021). Value-biased competition in the auditory system of the brain. *Journal of Cognitive Neuroscience*, 34(1), 180-191.

Kim, A. J., & Anderson, B. A. (2021). How does threat modulate the motivational effects of reward on attention? *Experimental Psychology*, 68, 165-172.

Kim, A. J., McDonald, A. D., Alambeigi, H., Goddard, T., & Anderson, B. A. (2021). Bicyclist-evoked arousal and greater attention to bicyclists independently promote safer driving. *Cognitive Research: Principles and Implications*, 6, 66.

Kim, A. J., Lee, D. S., & Anderson, B. A. (2021). Previously reward-associated sounds interfere with goal-directed auditory processing. *Quarterly Journal of Experimental Psychology*, 74(7), 1257-1263.

Kim, A. J., Lee, D. S., & Anderson, B. A. (2021). The influence of threat on the efficiency of goal-directed attentional control. *Psychological Research*, 85, 980-986.

Anderson, B. A., Kim, H., **Kim, A. J.**, Liao, M-R., Mrkonja, L., Clement, A., & Gregoire, L. (2021). The past, present, and future of selection history. *Neuroscience and Biobehavioral Reviews*, 130, 326-350.

Gregoire, L., **Kim, A. J.**, & Anderson, B. A. (2021). Semantic generalization of punishment-related attentional priority. *Visual Cognition*, 29(5), 310-317.

2020

- Kim, A. J.,** & Anderson, B. A. (2020). Arousal-biased competition explains reduced distraction by reward cues under threat. *eNeuro*, 7(4).
- Kim, A. J.,** & Anderson, B. A. (2020). The effect of concurrent reward on aversive information processing in the brain. *NeuroImage*, 217, 116890.
- Kim, A. J.,** & Anderson, B. A. (2020). Threat reduces value-driven but not salience-driven attentional capture. *Emotion*, 20, 874-889.
- Kim, A. J.,** & Anderson, B. A. (2020). Neural correlates of attentional capture driven by stimuli previously associated with social reward. *Cognitive Neuroscience*, 11(1-2), 5-15.
- Goddard, T., McDonald, A.D., Alambeigi, H., **Kim, A. J.,** & Anderson, B. A. (2020). Unsafe bicyclist overtaking behavior in a simulated driving task: The role of implicit and explicit attitudes. *Accident Analysis & Prevention*, 144, 105595.
- Anderson, B. A., & **Kim, A. J.** (2020). Selection history-driven signal suppression. *Visual Cognition*, 28, 112-118.
- Anderson, B. A., Kim, H., Britton, M. K., & **Kim, A. J.** (2020). Measuring attention to reward as an individual trait: The value-driven attention questionnaire (VDAQ). *Psychological Research*, 84, 2122-2137.
- 2017**
- Kim, A. J.,** Chang, J. Y-A., Shi, L., Chang, R. C-A., Ko, M. L., & Ko, G. Y. P. (2017). The effects of metformin on obesity-induced dysfunctional retinas. *Investigative Ophthalmology & Visual Science*, 58(1), 106-118.
- 2016**
- Shi, L., **Kim, A. J.,** Chang, R. C. A., Chang, J. Y. A., Ying, W., Ko, M. L., Zhou, B., & Ko, G. Y. P. (2016). Deletion of miR-150 exacerbates retinal vascular overgrowth in high-fat-diet induced diabetic mice. *PloS one*, 11(6), e0157543.
- 2015**
- Huang, C. C., Shi, L., Lin, C. H., **Kim, A. J.,** Ko, M. L., & Ko, G. Y. P. (2015). A new role for AMP-activated protein kinase in the circadian regulation of L-type voltage-gated calcium channels in late-stage embryonic retinal photoreceptors. *Journal of Neurochemistry*, 135, 727-741.
- Chang, R. C., Shi, L., Huang, C. C., **Kim, A. J.,** Ko, M. L., Zhou, B., & Ko, G. Y. P. (2015). High-fat-diet induced retinal dysfunction. *Investigative Ophthalmology & Visual Science*, 56, 2367-2380.
- Shi, L., Ko, S., Ko, M. L., **Kim, A. J.,** & Ko, G. Y. P. (2015). Peptide lv augments L-type voltage-gated calcium channels through vascular endothelial growth factor receptor 2 (VEGFR2) signaling. *Biochimica Et Biophysica Acta (BBA)-Molecular Cell Research*, 1853(5), 1154-1164.

06. JOURNAL COMMENTARIES

2024

- Kim, A. J.,** Senior, J., & Chen, K. (2024). Catecholamines: Influence on healthy aging and the progression of neurodegenerative diseases. *Neuroscience and Biobehavioral Reviews*, 162, 105733.

2023

- Kim, A. J.** (2023). Noradrenaline: Can we now directly measure in humans? *Current Biology*, 33(24), R1294-R1296.

07. CONFERENCE PRESENTATIONS

2026

- Kim, A. J.,** Chen, K., & Mather, M. (Nov). Mindfulness meditation to improve cognitive aging. *Gerontological Society of America*.

2025

- Kim, A. J.,** Zhao, C., Guo, F., Pappas, I., Dahl, M. J., Jacobs, H. I. L., Wang, D. J. J., & Mather, M. (Nov). Arousal increases locus coeruleus blood flow, salience-related brain responses, and modulates negative-valence attentional biases. *Society for Neuroscience*.

2024

- Kim, A. J.,** Nguyen, K., & Mather, M. (Nov). Eye movements reveal age differences in how arousal modulates mechanisms of attentional control. *Gerontological Society of America*.
- Kim, A. J.** (Sept). Eye movements reveal age differences in how arousal modulates mechanisms of attentional control. *Geroscience Los Angeles Meeting*.

2023

Kim, A. J., Senior, J., & Mather, M. (Nov). Aging leads to deficiencies in mechanisms of reactive attentional control but proactive distractor suppression is preserved. *Psychonomic Society*.

Kim, A. J., Cahn, B. R., Morales, S., & Mather, M. (Mar). The effects of resonance breathing on locus coeruleus activity in young and older adults. *Cognitive Neuroscience Society*.

Kim, A. J., Senior, J., Mather, M. (Nov). Age differences in attentional control and distractor suppression. *Psychonomic Society*.

2021

Kim, A. J., Lee, D. S., Grindell, J., & Anderson, B. A. (Nov). Selection history biases the strategic control of attention. *Psychonomic Society*.

Kim, A. J., Gregoire, L., & Anderson, B. A. (Nov). Value-biased competition in the auditory system of the brain. *Psychonomic Society*.

Kim, A. J., Alambeigi, H., Goddard, T., McDonald, A. D., & Anderson, B. A. (May). Linking threat-related attentional biases toward bicyclists to driving behavior. *Virtual-Visual Sciences Society*.

2020

Kim, A. J., McDonald, A. D., Alambeigi, H., Goddard, T., & Anderson, B. A. (Nov). Do threat-related attentional biases toward bicyclists promote or hinder safe driving? *Object Perception, Visual Attention, and Visual Memory (OPAM)*.

Kim, A. J., & Anderson, B. A. (Nov). Reward learning biases competition in the auditory system. *Psychonomic Society*.

Kim, A. J., & Anderson, B. A. (May). Arousal-biased competition explains reduced distraction by reward cues under threat. *Virtual-Visual Sciences Society*.

2019

Kim, A. J., Lee, D. S., & Anderson, B. A. (Nov). Threat improves performance in a goal-directed visual search task. *Psychonomic Society*.

Kim, A. J., & Anderson, B. A. (Nov). Arousal-biased competition explains reduced distraction by reward cues under threat. *Object Perception, Visual Attention, and Visual Memory (OPAM)*.

Kim, A. J., & Anderson, B. A. (Mar). Threat reduces value-driven but not salience-driven attentional capture. *Cognitive Neuroscience Society*.

2018

Kim, A. J., & Anderson, B. A. (Nov). Neural correlates of attentional capture driven by social reward. *Object Perception, Visual Attention, and Visual Memory (OPAM)*.

Kim, A. J., & Anderson, B. A. (May). Value-driven attentional capture under threat of shock. *Vision Sciences Society*.

2016

Kim, A. J., & Ko, G. Y. P. (May). The effects of metformin treatment in high-fat-diet (HFD) induced diabetic mice. *Association for Research in Vision and Ophthalmology (ARVO)*.

08. INVITED TALKS

2024

Kim, A. J., (2024). Attention, Arousal, Aging, & Alzheimer's disease. University of California Los Angeles Cognitive Forum.

09. ACADEMIC SERVICE

Journal Reviewer

Advances in Cognitive Psychology

Alzheimer's & Dementia

Biological Psychiatry: Cognitive Neuroscience and Neuroimaging

Cognition

Cognition & Emotion

Cognitive, Affective, & Behavioral Neuroscience

Current Biology

Emotion

Emotion Review

European Journal of Neuroscience
Journal of Experimental Psychology: General
Neurobiology of Aging
NeuroImage
Neuropsychologia
Neuropsychology
Neuroscience & Biobehavioral Reviews
Psychological Research
Psychological Science
Psychology & Aging
Psychonomic Bulletin & Review
Scientific Reports
Social Psychological Bulletin
Trends in Cognitive Science
Visual Cognition

External Grant Reviewer

U.S. National Science Foundation	2024 - 2026
Swiss National Science Foundation (joint reviewer)	2024

Department/University Service

USC Undergraduate Symposium Judge	2026
Aggieland Saturday Speaker	2019
Texas A&M Student Research Week Poster Session Judge	2019
Texas A&M Institute for Neuroscience Annual Symposium Poster Session Judge	2019

Conference Service

Psychonomic Society Focus Group	2022
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10. TEACHING EXPERIENCE

Teaching Assistant (Texas A&M University)

PSYC 360: Health Psychology & Behavioral Medicine (Spring 2019)
 PSYC 302: Experimental Psychology (Spring 2018)
 PSYC 302: Experimental Psychology (Fall 2017)
 VIBS 243: Intro to Histology (Spring 2017)
 VIBS 602: Histology (Spring 2017)
 NRSC 277: Intro to Neuroscience (Fall 2016)
 VIBS 243: Intro to Histology (Fall 2016)
 VIBS 602: Histology (Spring 2016)
 VIBS 450: Mammalian Functional Neuroanatomy (Fall 2015)
 VIBS 602: Histology (Fall 2015)