



Alesha Heath

Basic Life Res Scientist, Psych/Public Mental Health & Population Sciences

Bio

BIO

Dr. Alesha Heath is a Postdoctoral Scholar at Psychiatry and Behavioral Sciences at Stanford School of Medicine and the MIRECC the VA Palo Alto. She earned her PhD from the University of Western Australia and Sorbonne University.

Dr. Heath's research has been primarily focused on the mechanisms and applications of brain stimulation therapies, in particular repetitive transcranial magnetic stimulation. Her research involves both basic and clinical components with the aim of improving the efficacy of these therapies for the treatment of disorders such as depression and Alzheimer's disease.

EDUCATION AND CERTIFICATIONS

- Doctor of Philosophy, Sorbonne University (2019)

Publications

PUBLICATIONS

- **Developing a reverse translational model of low-intensity rTMS in alcohol use disorder: The influence of theta burst stimulation protocols on binge alcohol drinking in mice.** *Transcranial magnetic stimulation* (2024)
Dhungana, A., McCalley, D. M., Heath, A. M., Kraybill, E. P., Mojabi, F. S., Morales, J. M., Morningstar, A. R., Davis, A. K., Padula, C. B., Giardino, W. J., McNerney, M. W.
2025; 4
- **Network-targeted transcranial magnetic stimulation (TMS) for mild cognitive impairment (MCI).** *NeuroImage. Clinical*
Taylor, J. L., Bhatt, P., Hernandez, B., Iv, M., Adamson, M. M., Heath, A., Yesavage, J. A., McNerney, M. W.
2025; 47: 103819
- **Whole Genome Variable Number Tandem Repeat Analysis in Alzheimer Disease.** *Neurology. Genetics*
Heath, A., McNerney, M. W., Yesavage, J.
2025; 11 (2): e200241
- **rTMS Modulation of Behavioral and Biological Measures in 3xTg-AD Mice** *BRAIN SCIENCES*
Kraybill, E. P., Mojabi, F. S., Heath, A. M., Spikes, C. R., Beard, C., Mcnerney, M.
2024; 14 (12)
- **Memory-related hippocampal brain-derived neurotrophic factor activation pathways from repetitive transcranial magnetic stimulation in the 3xTg-AD mouse line** *EXPERIMENTAL GERONTOLOGY*
Mcnerney, M., Kraybill, E. P., Narayanan, S., Mojabi, F. S., Venkataramanan, V., Heath, A.
2023; 183

- **Memory-related hippocampal brain-derived neurotrophic factor activation pathways from repetitive transcranial magnetic stimulation in the 3xTg-AD mouse line.** *Experimental gerontology*
McNerney, M. W., Kraybill, E. P., Narayanan, S., Mojabi, F. S., Venkataramanan, V., Heath, A.
2023; 183: 112323
- **Hindbrain Stimulation Modulates Object Recognition Discrimination Efficiency and Hippocampal Synaptic Connections.** *Brain sciences*
Heath, A., Madore, M., Diaz, K., McNerney, M. W.
2023; 13 (10)
- **Repetitive Transcranial Magnetic Stimulation Improves Brain-Derived Neurotrophic Factor and Cholinergic Signaling in the 3xTgAD Mouse Model of Alzheimer's Disease.** *Journal of Alzheimer's disease : JAD*
McNerney, M. W., Heath, A., Narayanan, S., Yesavage, J.
1800
- **Improved object recognition memory using post-encoding repetitive transcranial magnetic stimulation.** *Brain stimulation*
Heath, A. M., Brewer, M., Yesavage, J., McNerney, M. W.
2021; 15 (1): 78-86
- **Moving Back in the Brain to Drive the Field Forward: Targeting Neurostimulation to Different Brain Regions in Animal Models of Depression and Neurodegeneration.** *Journal of neuroscience methods*
Madore, M., Poh, E., Bollard, S. J., Rivera, J., Taylor, J., Cheng, J., Booth, E., Nable, M., Heath, A., Yesavage, J., Rodger, J., McNerney, M. W.
2021: 109261
- **Sleep-wake disorders in Alzheimer's disease: further genetic analyses in relation to objective sleep measures.** *International psychogeriatrics*
Yesavage, J. A., Noda, A., Heath, A., McNerney, M. W., Domingue, B. W., Hernandez, Y., Benson, G., Hallmayer, J., O'Hara, R., Williams, L. M., Goldstein-Piekarski, A. N., Zeitzer, J. M., Fairchild, et al
2019: 1–7
- **rTMS for the treatment of Alzheimer's disease: where should we be stimulating?** *EXPERT REVIEW OF NEUROTHERAPEUTICS*
Heath, A., Taylor, J. L., McNerney, M.
2018; 18 (12): 903–5
- **Medium- and high-intensity rTMS reduces psychomotor agitation with distinct neurobiologic mechanisms** *TRANSLATIONAL PSYCHIATRY*
Heath, A., Lindberg, D. R., Makowiecki, K., Gray, A., Asp, A. J., Rodger, J., Choi, D., Croarkin, P. E.
2018; 8: 126