

Alexander J. Simon

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EDUCATION

B.S. in Cell and Molecular Biology 2015
San Francisco State University
Minor: Chemistry

RESEARCH POSITIONS

Research Associate 2020-present
Memory and Aging Center, University of California San Francisco
Studied sleep abnormalities in patients with neurodegenerative diseases.

Research Associate 2015-present
Neuroscape, University of California San Francisco
Researched and developed methods for improving cognition, studied how attention changes during aging and in psychiatric disorders, and used multimodal biosensing to characterize cognitive states.

Research Assistant 2014-2015
The Gazzaley Laboratory, University of California San Francisco
Studied the interactions between biomarkers of stress and attention.

LEADERSHIP ROLES

Cognitive Neuroscience Society Trainee Association 2019-present
Role: Vice President
Organized networking events and co-hosted a panel at the 2020 Cognitive Neuroscience Society Annual Conference.

Neuroscape Virtual Conference Organization Committee 2020
Role: Co-host
Organized and co-hosted virtual poster and data blitz sessions.

Cognitive Neuroscience Society Trainee Association 2018-2019
Role: Officer
Facilitated events hosted by the Cognitive Neuroscience Society Trainee Association, including a panel and a networking event.

Neuroscape Journal Clubs 2017-2020
Role: Co-organizer
Organized monthly journal clubs within Neuroscape and with collaborators.

Neuroscape Code Reviews 2018-2019
Role: Co-organizer
Organized and hosted monthly meetings to share best practices in scientific programming within Neuroscape and with collaborators.

CONFERENCE TALKS

Frontal and Parietal Neural Markers Predict a Clinical Measure of Attention (2018). Bay Area Memory Meeting. Davis, CA.

MENTORING EXPERIENCE

Research Assistant Supervisor 2015-present
Departments of Neurology and Physiology, University of California San Francisco
Supervised and trained 26 lab volunteers from the community, undergraduate institutions, and Master's programs including UC Berkeley, San Francisco State University, University of San Francisco, and UC Santa Cruz.

UC Berkeley Fung Fellowship Supervisor 2017
Department of Neurology, University of California San Francisco
Trained and supervised a Fung Fellowship recipient from UC Berkeley.

Undergraduate Thesis Supervisor 2017, 2019
Department of Neurology, University of California San Francisco
Trained and supervised two senior thesis projects from San Francisco State University and one from UC Berkeley.

Undergraduate Capstone Project Supervisor 2019
Department of Neurology, University of California San Francisco
Trained and supervised a team of four students working on a bioengineering Capstone Project at UC Berkeley.

High School Internship Mentor
Department of Neurology, University of California San Francisco
Fremont High School, Fremont, CA 2018-2020
Gilroy High School, Gilroy, CA 2017-2019

Tutoring

Wyzant.com	
<i>Richmond High School, Richmond, CA</i>	2017-2018
<i>Lowell High School, San Francisco, CA</i>	2015
<i>San Francisco State University, San Francisco, CA</i>	2014-2015

Coaching

Albany Middle School	2018-2019
<i>Head wrestling coach</i>	
Lincoln High School	2014-2015
<i>Assistant wrestling coach</i>	
Cheyenne Mountain Youth Wrestling Club	2008-2011
<i>Volunteer assistant coach</i>	

CONSULTING

Data analyst

Cortica	2019-2020
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PEER REVIEW SERVICE

IEEE Transactions on Haptics

PROFESSIONAL AFFILIATIONS

Bay Area Memory Meeting planning committee member	2018-present
Cognitive Neuroscience Society	2017-present
Society for Neuroscience member	2016-present
SACNAS: San Francisco State University chapter	2013-2015

UNDERGRADUATE AWARDS AND HONORS

Dean's List	2013-2015
Interscholastic athletic scholarship recipient	2011-2014
Varsity NCAA wrestler at San Francisco State University	2010-2014
Colorado Greco-Roman wrestling state champion	2010

PEER-REVIEWED PUBLICATIONS

Anguera, JA., Schachtner, J., **Simon, AJ.**, Volponi, JJ., Javed, S., Gazzaley, A. *Long-term*

maintenance of multitasking abilities following video game training in older adults (2021). *Neurobiology of Aging* (in press).

Bréchet, L., Ziegler, DA., **Simon, AJ.**, Brunet, D., Gazzaley, A., Michel, CM. *Reconfiguration of EEG microstate networks after breath-focused digital meditation training* (2020). *Brain Connectivity*, PMID: 33409474.

Simon, AJ., Schachtner, J., Gallen, CL. *Disentangling Expectation from Selective Attention During Perceptual Decision-Making* (2019). *Journal of Neurophysiology*, PMID: 30864895.

Ziegler, DA., **Simon, AJ.**, Gallen, CL., Skinner, S., Janowich, JR., Volponi, JJ., Rolle, C., Mishra, J., Kornfield, J., Anguera, JA., Gazzaley, A. *Closed-loop, Digital Meditation Improves Sustained Attention in Young Adults* (2019). *Nature Human Behavior*, PMID: 31160812.

Simon, AJ., Skinner, S., Ziegler, D. *Training Working Memory: Anatomy Matters* (2016). *Journal of Neuroscience*, PMID: 27466326.

MANUSCRIPTS IN PREPARATION

Simon, AJ., Gallen, CL., Anguera, JA., Ziegler, DA., Volponi, JJ., Campusano, R., Mishra, J., Gazzaley, A. *Defining Attention Span: How Long Can You Sustain an “In the Zone” Attention State?*

Gallen, CL., **Simon, AJ.**, Volponi, JJ., Anguera, JA., Ziegler, DA., Mishra, J., Gazzaley, A. *Using Resting State EEG to Predict Cognitive Intervention Response.*

Anguera, JA., Volponi, JJ., **Simon, AJ.**, Gallen, CL., Thompson, C., Ziegler, DA., Mishra, J., Rolle, C., Schachtner, J., Javed, S., Colville, A., Gazzaley, A. *Evidence that Synergized Cognitive and Physical Training Enhances Attentional Stability in Older Adults.*

Ziegler, DA., **Simon, AJ.**, Colville, AB., Gallen, CL., Gugel, M., Verma, A., Janowich, JR., Volponi, JJ., Kornfield, J., Anguera, JA., Gazzaley, A. *Closed-loop, Digital Meditation Improves Attention and Stress Regulation in Older Adults.*

POSTER PRESENTATIONS

Anguera, JA., Gerdes, MR., Jurigova, BG., **Simon, AJ.**, Mittermaier, DR., Gazzaley, A., Marco, EJ. *Can a home-based digital treatment improve neural biomarkers of attention for children with ADHD?* (2020) 16th International Child Neurology Association Congress (ICNC). San Diego, CA.

Anguera, JA., Gerdes, MR., Jurigova, BG., **Simon, AJ.**, Mittermaier, DR., Gazzaley, A., Marco, EJ. *Efficacy of Synergized Cognitive-Physical Training for Children with Inattention* (2020). International Society for Autism Research. Seattle, WA.

Simon, AJ., Gallen, CL., Volponi, JJ., Campusano, R., Schachtner, JN., Colville, AB., Verma, A., Ziegler, DA., Mishra, J., Anguera, JA., Gazzaley, A. *Characterizing Optimal Sustained Attention in Older Versus Young Adults Using EEG* (2020). Cognitive Neuroscience Society annual meeting. Boston, MA.

Simon, AJ., Anguera, JA., Ziegler, DA., Gallen, CL., Volponi, JJ., Campusano, R., Mishra, J., Marco, EJ., Gerdes, MR. Schachtner, JN., Colville, AB., Gugel, M., Gazzaley, A. *Attention Span Decrements in Populations with Attention Impairments* (2020). Neuroscape Virtual Conference.

Thompson, CJ., Larkin, B., Volponi, JJ., **Simon, AJ.**, Anguera, JA., Gazzaley, A. *Maximal Oxygen Uptake Responders Versus Nonresponders Show Differing Cognitive Responses to Movement-based Video Game Training* (2019). American College of Sports Medicine annual meeting. Orlando, FL.

Simon, AJ., Ziegler, DA., Mishra, J., Anguera, JA., Gazzaley, A. *Using multivariate EEG to predict a clinical measure of attention* (2019). Cognitive Neuroscience Society annual meeting. San Francisco, CA.

Volponi, JJ., **Simon, AJ.**, Colville, AB., Javed, SV., Larkin, BJ., Samplay, KK., Park, SM., Schachtner, JN., Anguera, R., Thompson, CJ., Anguera, JA., Gazzaley, A. *Neural and behavioral transfer of a simultaneous cognitive-physical video game intervention in an older adult population* (2019). Cognitive Neuroscience Society annual meeting. San Francisco, CA.

Dacorro, L., Leggit, A., **Simon, AJ.**, Rauen, K., Wais, P., Geisler, M. *Event related potentials of negative-valenced visual distractors on visual working memory* (2019). Cognitive Neuroscience Society annual meeting. San Francisco, CA.

Gerdes, MR., Jurigova, BG., **Simon, AJ.**, Sandling, J., Anguera, JA., Marco, EJ. *Efficacy of Synergized Cognitive-Physical Training for Children with Inattention* (2019). International Society for Autism Research Annual Meeting. Montreal, Canada.

Ziegler, DA., **Simon, AJ.**, Rolle, C., Skinner, S., Gallen, C., Gazzaley, A. *Closed-loop, digital, meditation training program improves sustained attention* (2018). Society for Neuroscience. San Diego, CA. Online.

Volponi, JJ., **Simon, AJ.**, Colville, A, Javed, S., Larkin, B., Samplay, K., Park, S., Schachtner, J., Anguera, R., Thompson, CJ., Anguera, JA., Gazzaley, A. *The effects of a novel simultaneous cognitive-physical training video game on an older adult population* (2018). Bay Area Memory Meeting. Davis, CA.

Simon, AJ., Campusano, R., Volponi, JJ., Skinner, SN., Anguera, JA., Gazzaley, A., Ziegler, DA. *Common and Unique Markers of Sustained Attention and Impulse Control* (2018). Cognitive Neuroscience Society annual meeting. Boston, MA.

Ziegler, DA., Skinner, SN., **Simon, AJ.**, Gazzaley, A. *Meditation-Inspired Cognitive Training Improves Working Memory and Increases Cortical Thickness* (2017). The annual meeting of the Organization for Human Brain Mapping. Vancouver, Canada.

Thompson, C.J., Khan, C., Whitton-Martinez, L., Volponi, J.J., Souza, J., **Simon, A.J.**, Skinner, S.N., Kingsbook, D., Leggitt, A., Anguera, J.A., Gazzaley, A. *Physiological And Cognitive Adaptations To 8 Weeks Of Training On A Movement-based Video Game* (2016). American College of Sports Medicine annual meeting. Boston, MA.

Skinner, S.N., **Simon, A.J.**, Ziegler, D.A., Gazzaley, A. *Internal Attention Training Improves Sustained Attention and Distractor Suppression in Young Adults* (2016). Society for Neuroscience annual meeting. San Diego, CA.

Simon, A.J., Ziegler, D.A., Janowich, J.R., Gazzaley, A. *Baseline sympathetic activity predicts performance on a novel attention task in the presence of auditory distractions* (2015). Bay Area Memory Meeting. Davis, CA.

Volponi, J.J., Rolle, C., **Simon, A.J.**, Kingsbook, D., Anguera, R., Thompson, C., Khan, C., Anguera, J.A., Gazzaley, A. *Examining the benefit of a novel simultaneous cognitive-physical training video game* (2015). Bay Area Memory Meeting. Davis, CA.