

Joaquin A. Anguera, Ph.D.

Curriculum Vitae

OFFICES

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<http://psychdhc.ucsf.edu/>

RESEARCH INTERESTS

- Developing cognitive assessments & interventions for healthy & impaired children, younger & older adults
- Leveraging mobile (e.g. tablet, phone) and cutting-edge technologies (e.g. VR, motion capture) to augment data collection practices across different populations & research questions
- The use of different neuroimaging techniques (EEG, fMRI) to elucidate brain structure-function relationships
- Interrogating how interference resolution abilities are affected in different populations

POSITIONS / EDUCATION

July 2020 - Adjunct Associate Professor
Departments of Neurology & Psychiatry
University of California, San Francisco

August 2016 - Director of Clinical Program | Neuroscape
Department of Neurology
University of California, San Francisco

July 2015 - Director of Digital Health Core
Department of Psychiatry
University of California, San Francisco

2014 – (June 30 2020) Adjunct Assistant Professor
Departments of Neurology & Psychiatry
University of California, San Francisco

2013 - 2014 Research Scientist/Associate Specialist, Departments of Psychiatry, Neurology & Physiology
Areán & Gazzaley Laboratories
Principle Investigators: Patricia Areán & Adam Gazzaley
University of California, San Francisco

2009 - 2013 Postdoctoral Fellow, Departments of Neurology and Physiology
Gazzaley Laboratory
Principle Investigator: Adam Gazzaley
University of California, San Francisco

2003 - 2008 Ph.D. in Kinesiology
Neuromotor Behavior Laboratory
Principal Investigator: Rachael D. Seidler
University of Michigan, Ann Arbor, MI
Chair: Rachael D. Seidler

2001- 2003 M.S. in Kinesiology, graduated with distinction
Area of focus: Biomechanics
California State University, Northridge
Chair: William C. Whiting

2000 B.S. Animal Physiology and Neuroscience
Minor (2): Chemistry, Psychology
University of California, San Diego

Research Support

ACTIVE

R21 (Anguera/Gazzaley) 02/01/2019-06/31/2021

NIA (R21AG058896)

Enhancing cognitive control abilities using mobile technology in a senior living community

The purpose of this grant is to assess test the feasibility of launching a personalized digital health assessment and remediation program for the older adults in senior living communities based upon an initial characterization of these abilities.

Role: PI

R61/R33 (Anguera/Areán/Gunning) 07/01/2016-08/30/2021

NIMH (MH110509)

A Computerized Intervention Targeting Cognitive Control Network Deficits in Depression

The purpose of this pilot project is to assess consumer engagement, predictive utility, and clinical applicability of mobile, IT-enabled assessment of cognitive, physical and social activity in patients seeking treatment for depression and anxiety.

Role: Site PI

Chan Zuckerberg Initiative, LLC (Anguera/Hoeft) 09/01/2018-02/01/2022

Development and Validation of Precision Learning Executive Function (PLEF) App

The overall aim is to develop and validate a set of modules, to be delivered in a mobile technology platform that will provide multi-dimensional, precision metrics of executive functions (EFs) in children and adults, aged 3 to 103.

Role: Multi-Principle Investigator

Chan Zuckerberg Initiative, LLC (Anguera/Gazzaley/Uncapher) 02/01/2021-02/01/2022

Development of Dashboard for PLEF app

The overall aim is to develop a usable, interpretable dashboard for teachers and parents to make actionable decisions for students, using data collected from the PLEF app.

Role: Principle Investigator

U.S. Army Medical Research (DoD) (Anguera/Wooley) 01/01/2021-02/01/2022

Optimizing Attention Bias Modification for Posttraumatic Stress Disorder: An Entirely Remote Study

To determine the effects of both ABM and ACT on threat-related attentional biases and PTSS severity, to determine if any positive effects are durable at eight weeks, and to compare words and faces as stimuli.

Role: Principle Investigator

Completed Research Support – ANGUERA PI

UCSF RAP Award (Miaskowski/Anguera/Possin) 09/01/2019 – 08/30/2020

UCSF- Clinical & Translational Science Institute (CTSI)-Team Science Award Program

A Pilot Study of a Novel Cognitive Intervention for Cancer Survivors

The goal of this study is to assess the feasibility of a novel video game intervention for survivors of cancer treatments to improve their cognitive function.

Role: Co-Principle Investigator

R01AG049424 (Gazzaley) 08/15/15 – 05/31/20

NIH/NIA

Enhancing Cognitive Control in Older Adults with Complementary Interventions

The goal of this project is to document the neural and physiological mechanisms by which older adults reap cognitive and functional benefits from individual and combined cognitive and meditation training. This knowledge will be used to design more effective cognitive training interventions to improve quality of life for older adults and individuals with cognitive impairment from neurological and psychiatric disease.

Role: Key Personnel

R56 NIMH (R56MH111672) <i>Multi-modal study of cognitive and neural differences in media multitaskers</i> The purpose of this project is to assess executive function in children and the relationship of their media use. Role: Site PI	(Anguera/Wagner)	08/01/2017-07/30/2019
AIM for Mental Health <i>Attention Difficulties with Monterey County Youth</i> The goal of this pilot study involves the deployment of a novel, adaptive attention training software, Engage, in adolescents who have difficulties with attention. The pilot study plans to validate the feasibility and efficacy of this novel training in a group of 20 adolescents, ages 12-16, in Monterey County. Role: Co-PI	(Gazzaley/Anguera)	12/01/2018-12/01/2019
UCSF RAP Award UCSF- Clinical & Translational Science Institute (CTSI)-Pilot Awards Program <i>Does synergistic brain and body training improve attention and neural activity in school aged children?</i> The goal of this study is to assess the feasibility of collecting cognitive and physical data for children with issues of inattention at a middle school. Role: Principle Investigator	(Anguera)	08/01/2018 – 07/30/2019
Verily Life Sciences <i>An open-access, cognitive battery mobile app</i> The goal of this project is to create a fully mobile cognitive assessment platform called ACE (Adaptive Cognitive Evaluation), using adaptive algorithms and gaming principles to better engage participants with the goal of acquiring more robust data. Role: Multi-Principle Investigator	(Gazzaley/Anguera)	06/01/2017-06/01/2019
MH092201-04-UCSF NIMH (U19MH14110) Group Health Cooperative of Puget Sound, Subcontract Next Generation of Clinical Assessment Using Mobile Devices The purpose of this pilot project is to assess consumer engagement, predictive utility, and clinical applicability of mobile, IT-enabled assessment of cognitive, physical and social activity in patients seeking treatment for depression and anxiety. Role: Site PI	(Anguera)	04/07/2015 – 06/30/2017
R34 NIMH (MH100399) <i>Enhancing Functional Outcomes in Schizophrenia Using a Novel mHealth Approach</i> The goal of this project is to complete the development and pilot testing of a mobile health app to improve motivation, thereby improving functional outcomes in individuals with recent-onset (RO) schizophrenia. Role: Multi-Principle Investigator	(Anguera/Vinogradov)	06/01/2015-05/31/2017
R34 NIH/NIMH (MH100466) Can mental health apps work in the real world? A feasibility study The purpose of this pilot study is to test the feasibility of conducting a future randomized controlled trial investigating access, engagement and impact of mental health apps in a fully remote study. Role: Principle Investigator	(Anguera/Gazzaley)	06/24/2013 – 03/31/2017
R34 NIMH <i>Scaling a smarter and more efficient intervention: Evaluating the feasibility of disseminating a novel mobile app platform to treat depression</i> The goal of this project is to conduct a pilot study to test the utility of a Natural Language Processing (NLP) clinical messaging tool to improve the reach and the quality (fidelity and competency) of coaches providing behavioral activation (BA) strategies through a mobile mental health app called Personalized Real-time Intervention for Motivational Enhancement (PRIME) Role: Principle Investigator	(Anguera/Areán) (MH110583)	07/01/2016-06/30/2018

Marcus Program SBI Award (Anguera) 04/01/2016 – 03/30/2017
 UCSF- Marcus Program in Precision Medicine
A Real-world, Real-time Mental Health Assessment
 The goal of this project is to move cutting-edge mental health assessments outside of UCSF labs/clinics and into clinics, homes, and classrooms.
 Role: Principle Investigator

CADC Prime Award (Anguera) 09/01/2014 – 08/30/2016
 UCSF- Pepper Center
Leveraging mobile technology to deliver & assess cognition amongst minority older adults
 The goal of this study is to assess the feasibility of collecting cognitive data in a mobile fashion across different minority populations.
 Role: Principle Investigator

Toyota Motor Engineering & Manufacturing (Gazzaley) 01/01/2018 – 12/31/18
Optimal Response – Signaling in the “Closed Loop” between Driver and Vehicle in Semi-Automated Driving
 Develop a “proof of concept” of Optimal Response-Signaling (ORS), reveal a handful of positive features that ORS possesses for intelligent interaction that can be realizable in the cockpit environment of semi- automatic driving, and provide a proof of concept of ORS phenomena with a realistic driving simulation.
 Role: Key Personnel

HHSN271201700752P (Gazzaley) 01/01/2018 – 12/31/18
 NIH/NIMH
Design Consulting for Research Domain (RDoC) Criteria Field Test Battery
 The goal of this project is to provide a comprehensive overview of existing and future mobile applications that could be used (or created) to better assess and evaluate distinct RDoC criteria.
 Role: Key Personnel

NSF Science of Learning (Gazzaley) 09/30/15 – 09/29/18
SL-CN: Contributions of executive function subdomains to mathematical cognition and reading in the classroom: Assessment and training
 The overall aim of the collaborative research network is to elucidate how the multiple domains of executive functions (EFs) contribute to individual differences in math and reading abilities in middle childhood. The research program proposes a large-scale, longitudinal investigation of how EF profiles relate to math and reading achievement, and whether personalized EF training can improve math and reading abilities.
 Role: Co-Investigator

Mobile Health Research Award (Schlosser) 02/01/2014 – 01/31/2016
 UCSF-Resource Allocation Program
PRIME-D: Personalized Real-time Intervention for Motivational Enhancement for Depression
 The goal of this study is to assess an entirely remote research approach to deliver a personalized intervention to individuals with depression.
 Role: Co-Investigator

Marcus Program SBI Award (Mishra) 04/01/2016 – 03/30/2017
 Global Brain Health Institute
NeuroACE - a scalable neuro-cognitive diagnostic app serving global mental health
 The goal of this study is to develop and evaluate ‘NeuroACE’ - a mobile cognitive assessment battery with simultaneous neural recordings.
 Role: Co-Investigator

EMPIRICAL PUBLICATIONS

- Jurigova, B.G., Gerdes, M.R., **Anguera, J.A.**, Marco, E.J. (2021). Sustained benefits of cognitive training in children with inattention, three-year follow-up. *PLOS ONE*.
- Atallah M, Cooper B, Muñoz RF, Paul SM, **Anguera JA**, Levine JD, Hammer M, Wright F, Chen LM, Melisko M, Conley YP, Miaskowski C, Dunn LB. (2020). Psychological Symptoms and Stress Are Associated With Decrements in Attentional Function in Cancer Patients Undergoing Chemotherapy. *Cancer Nurs*. 43(5):402-410. PMID: 30998605.
- Wang T, Merkle EC, **Anguera JA**, Turner BM. (2020). Score-based tests for detecting heterogeneity in linear mixed models. *Behav Res Methods*. PMID: 32666394.
- Bove R, Rowles W, Zhao C, Anderson A, Friedman S, Langdon D, Alexander A, Sacco S, Henry R, Gazzaley A, Feinstein A, **Anguera JA**. (2020). A novel in-home digital treatment to improve processing speed in people with multiple sclerosis: A pilot study. *Mult Scler*. 1352458520930371.
- Li G, **Anguera JA**, Javed SV, Khan MA, Wang G, Gazzaley A.(2020). Enhanced Attention Using Head-mounted Virtual Reality. *J Cogn Neurosci*. 32(8):1438-1454. PMID: 32286132.
- Ziegler, D.A., Simon, A.J., Gallen, C.L., Skinner, S., Janowich, J.R., Volponi, J.J., Rolle, C.E., Mishra, J., Kornfield, J., **Anguera, J.A.**, Gazzaley, A. (2019). Closed-loop Digital Meditation Improves Sustained Attention in Young Adults. *Nature Human Behavior*. Nat Hum Behav. 2019 07; 3(7):746-757.
- Bove, R.M., Rush G., Zhao C., Rowles W., Garcha P., Morrissey J., Schembri A., Alailima T., Langdon D., Possin K., Gazzaley A., Feinstein A, **Anguera J.A.** (2019). Videogame-Based Digital Therapeutic to Improve Processing Speed in People with Multiple Sclerosis: A Feasibility Study. *Neurol Ther*. Nov 30.
- Atallah M, Cooper B, Muñoz RF, Paul SM, **Anguera JA**, Levine JD, Hammer M, Wright F, Chen LM, Melisko M, Conley YP, Miaskowski C, Dunn LB (2019). Psychological Symptoms and Stress Are Associated With Decrements in Attentional Function in Cancer Patients Undergoing Chemotherapy. *Cancer Nurs*. 2019 Apr 15.
- Brandes-Aitken, A., **Anguera, J.A.**, Chang, Y.S., Demopoulos, C., Owen, J.P., Gazzaley, A., Mukherjee, P., Marco, E.J. (2019). White Matter Microstructure Associations of Cognitive and Visuomotor Control in Children: A Sensory Processing Perspective. *Frontiers in Integrative Neuroscience*. DOI: 10.3389/fnint.2018.00065
- Pratap, A., Atkins, D.C., Renn, B.N., Tanana, M.J., Mooney, S.D., **Anguera, J.A.**, Areán, P.A. (2019). The Accuracy of Passive Phone Sensors in Predicting Daily Mood. *Depression and Anxiety*, 36(1): 72-81.
- Pratap, A., Renn, B.N., Volponi, J., Mooney, S.D., Gazzaley, A., Areán, P.A., **Anguera, J.A.** (2018). Using mobile apps to assess and treat depression in Hispanics and Latinos: Results from a fully remote and randomized clinical trial. *Journal of Medical Internet Research*, 20(8): e10130.
- Bauer, A.M., Baldwin, S.A., **Anguera, J.A.**, Areán, P.A., Atkins, D.C. (2018). Comparing Approaches to Mobile Depression Assessment for Measurement-Based Care: Prospective Study. *Journal of Medical Internet Research*, 20(6): e10001.
- Brandes-Aitken, A., **Anguera, J.A.**, Rolle, C., Desai, S., Skinner, S., Gazzaley, A., Marco, E. (2018). Characterizing cognitive & visuomotor control in children with sensory processing dysfunction and autism spectrum disorders. *Neuropsychology*. 32(2):148-160.
- Rolle, C.E., **Anguera, J.A.**, Skinner, S.N., Voytek, B, Gazzaley, A. (2017). Enhancing Spatial Attention and Working Memory in Younger and Older Adults. *Journal of Cognitive Neuroscience*. 29(9): 1483-1497.
- Anguera, J.A.**, Brandes-Aitken, A., Antovich, A.D., Rolle, C., Desai, S.S., Marco, E.J. (2017). A pilot study to determine the feasibility of enhancing cognitive abilities in children with sensory processing dysfunction. *PLoS One*. 12(4): e0172616.
- Schlosser, D.A., Campellone, T.R., Truong, B., **Anguera, J.A.**, Vergani, S., Vinogradov, S., Areán, P.A. (2017). The Feasibility, Acceptability, and Effectiveness of PRIME-D: A Novel Mobile Intervention Treatment for Depression. *Depression and Anxiety*. 34(6): 546-554.
- Anguera, J.A.**, Gunning-Dixon, F., Areán, P.A. (2017). Improving late life depression and cognitive control through the use of therapeutic video game technology: a proof of concept randomized trial. *Depression and Anxiety*. 34(6): 508-517.

Areán, P.A., Hallgren, K.A., Jordan, J.T., Gazzaley, A., Atkins, D.C., Heagerty P.J., **Anguera, J.A.** (2016). The Use and Effectiveness of Mobile Apps for Depression: Results From a Fully Remote Clinical Trial. *Journal of Medical Internet Research*, 18(12): e330.

Anguera, J.A., Brandes-Aitken, A., Rolle, C.E., Skinner, S.N., Desai, S., Bower, J., Martucci, W.E., Chung, W., Sherr, E.H., Marco, E.J. (2016). Characterizing cognitive control abilities in children with 16p11.2 deletion using adaptive “video game” technology: a pilot study. *Translational Psychiatry*. 20(6): e893.

Anguera, J.A., Jordan, J.T., Castaneda, D., Gazzaley, A., Areán, P.A. (2016). Conducting a fully mobile and randomised clinical trial for depression: access, engagement and expense. *BMJ Innovations* 2: 14-21.

Hsu, W.Y., Zanto, T.P., **Anguera, J.A.** Lin, Y.Y., Gazzaley, A. (2015). Delayed enhancement of multitasking performance: Effects of anodal transcranial direct current stimulation on the prefrontal cortex. *Cortex*.

Guerreiro, M.J., **Anguera, J.A.**, Mishra, J., Van Gerven, P.W., & Gazzaley, A. (2014). Age-equivalent top-down modulation during cross-modal selective attention. *Journal of Cognitive Neuroscience*. Dec;26(12):2827-39.

Anguera, J.A., Boccanfuso, J., Rintoul, J.L., Al-Hashimi, O., Faraji, F., Janowich, J., Kong E., Laraburo, Y., Rolle, C., Johnston, E., & Gazzaley, A. (2013). Video game training enhances cognitive control abilities in older adults. *Nature*. 501 (7465): 97-101.

Anguera, J.A., Lyman, K., Zanto, T.P., Bollinger, J. and Gazzaley, A. (2013). Reconciling the influence of task-set switching and motor inhibition processes on stop signal after-effects. *Frontiers in Psychology*, 4:649.

Anguera, J.A., Bernard, J., Reuter-Lorenz, P.A., Jaeggi, S.M., Buschkuhl, M., Benson, B.L., Jennett, S., Humfleet, J., Jonides, J., & Seidler, R.D. (2012). The effects of working memory resource depletion and training on sensorimotor adaptation. *Behavioural Brain Research*. 228(1):107-15.

Anguera, J.A. and Gazzaley, A. (2012). Dissociation of motor and sensory inhibition processes in normal aging. *Clinical Neurophysiology*. 123(4), 730-40.

Fling, B.W., Chapekis, M., Reuter-Lorenz, P.A., **Anguera, J.** Bo, J., Langan, J., Welsh, R.C., Seidler, R.D. (2011). Age differences in callosal contributions to processing speed and working memory. *Neuropsychologia*. Jul;49(9): 2564:9.

Benson, B.L., **Anguera, J.A.**, & Seidler, R.D. (2011). An explicit strategy enhances motor performance but interferes with sensorimotor adaptation. *Journal of Neurophysiology*. Jun; 105(6): 2843-51.

Anguera, J.A., Reuter-Lorenz, P.A., Willingham, D.T., and Seidler, R.D. (2011). Failure to engage spatial working memory contributes to age-related declines in visuomotor learning. *Journal of Cognitive Neuroscience*. Jan;23(1):11-25.

Anguera, J.A., Reuter-Lorenz, P.A., Willingham, D.T., and Seidler, R.D. (2010). Contributions of spatial working memory to visuomotor adaptation. *Journal of Cognitive Neuroscience*. Sep; 22(9): 1917-30.

Anguera, J. A., Seidler, R. D., & Gehring, W. J. (2009). Changes in error monitoring during sensorimotor adaptation. *Journal of Neurophysiology*. Sep;102(3):1868-79.

Anguera, J.A., Russell, C.A., Noll, D.C., & Seidler, R.D. (2007). Neural correlates associated with intermanual transfer of sensorimotor adaptation. *Brain Research*, 1185: 136-51.

REVIEW PAPERS / BOOK CHAPTERS

Areán, P.A., **Anguera, J.A.**, Lenze, E. (2016). Mood disorders in late life. Oxford University Press

Mishra, J., **Anguera, J.A.** and Gazzaley, A. (2016) Video games for Neuro-Cognitive Optimization. *Neuron*, 90, 214-218.

Anguera J.A. & Gazzaley, A. (2015). Video games, cognitive exercises, and the enhancement of cognitive abilities. Video games, cognitive exercises, and the enhancement of cognitive abilities. *Current Opinion in Behavioral Sciences* 4:160–165

Mishra, J., **Anguera, J.A.**, Ziegler, D.A., & Gazzaley, A. (2013). A cognitive framework for understanding and improving interference resolution in the brain. *Progress in Brain Research*. 207: 351-77.

Seidler, R.D., Bo, J., **Anguera, J.A.** (2012). *Journal of Motor Behavior*. Neurocognitive contributions to motor skill learning: the role of working memory. 44 (6): 445-453.

Anguera, J.A., Bo, J., & Seidler, R.D. (2011). Aging effects on motor learning, Invited review chapter for Encyclopedia of the Sciences of Learning. N. Seel, editor. Springer Publishing (2011).

Goble DJ, **Anguera J.A.** (2010). *Journal of Neurophysiology*. Plastic changes in hand proprioception following force-field motor learning. Sep;104(3):1213-5.

Seidler, R. D., Bangert, A. S., **Anguera, J.A.**, & Walsh, C. M. (2006). Motor Performance, pp.801 - 806. Invited review chapter for Encyclopedia on Aging. R. Schulz, L. Noelker, K. Rockwood, R. Sprott, eds. Springer Publishing.

Seidler, R. D., Bangert, A. S., **Anguera, J.A.**, & Walsh, C. M. (2006). Motor Control, pp. 228-236. Encyclopedia of Gerontology (Second Edition): Age, Aging and the Aged. J. Birren, editor. Elsevier press.

CONFERENCE ABSTRACTS

Pratap, A. *, **Anguera, J.A.***, Renn, B.N., Neto, E.C., Volponi, J., Mooney, S.D., Areán, P.A. The feasibility of using smartphones to assess and remediate depression in Hispanic/Latino individuals nationally (2017). UBICOMP Workshop, Boston, MA.

Anguera, J.A., Brandes-Aitken, A., Antovich, A.D., Rolle, C., Desai, S.S., Marco, E.J. (2017). Enhancing attention in children with sensory processing dysfunction (2017). *American Academy of Child & Adolescent Psychiatry (AACAP), Washington D.C.*

Brandes-Aitken, A., **Anguera, J.A.**, Chang, Y.S., Owen, J.P., Mukherjee, P., Marco, E. (2017). Assessing White Matter Correlates of Cognitive and Visuomotor Control Deficits in Children with SPD (2017). *American Academy of Child & Adolescent Psychiatry (AACAP), Washington D.C.*

Anguera, J.A., Niu, G., Catledge, C., Gross, M., Han, C., Pugh, S., Gunning-Dixon, F., Gazzaley, A., Areán, P.A. Improving symptoms of depression & cognitive decline in late life depression individuals using video games (2015). *Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, San Francisco, CA.*

Jordan, J.T., **Anguera, J.A.**, Gazzaley, A., Areán, P.A. Testing the feasibility & utility of using mobile applications to treat depression (2015). *Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, San Francisco, CA.*

Rolle, C.E., **Anguera, J.A.**, Antovich, A., Aitken, A., Desai, S., Oh, H.M., Gazzaley, A., Marco, E.J. Remediating attention-based deficits using video games in children with sensory processing disorder (2015). *Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, San Francisco, CA.*

Al-Hashimi, O., **Anguera, J.A.**, Rolle, C.E., Gazzaley, A. Video Game Play during fMRI to Explore Neural Basis of Speed of Processing Differences across Early Adult Lifespan (2015). *Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, San Francisco, CA.*

Castaneda, D., **Anguera, J.A.**, Areán, P.A. Mental health wellness apps on mobile devices: Changing access and engagement towards mental health (2015). San Antonio, Tx.

Anguera, J.A., Jordan, J.T., Gazzaley, A., Areán, P.A. Testing the feasibility & utility of using mobile applications to treat depression (2015). *RCMAR Annual Meeting, Davis, CA. **Best Poster Award Winner***

Anguera, J.A., Rolle, C.E., Gazzaley, A. Behavioral and neural characterization of distraction across the adult lifespan (2014). *Cognitive Neuroscience Annual Meeting, Boston, MA.*

Anguera, J.A., Rolle, C., Desai, S., Aitken, A., Gibbons, J., Harris, J., Gazzaley, A., Marco, E. The influence of distraction on discrimination and visuomotor tracking in sensory deficient processing & autistic children (2013). *International Meeting for Autism Research (IMFAR), San Sebastian, Spain.*

Anguera, J.A., Rolle, C., Desai, S., Aitken, A., Gibbons, J., Harris, J., Gazzaley, A., Marco, E. The influence of distraction on discrimination and visuomotor tracking in sensory deficient processing & autistic children (2013). *Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, Los Angeles, CA.*

Janowich, J, **Anguera, J.A.,** & Gazzaley, A. Initial midline-frontal theta predicts efficacy of multi-tasking video game training in older adults (2013). *Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, Los Angeles, CA.*

Al-Hashimi, O, **Anguera, J.A.,** Rolle, C., & Gazzaley, A. Video game play during fMRI to explore neural basis of speed of processing differences across early adult lifespan (2013). *Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, Los Angeles, CA.*

Al-Hashimi, O, **Anguera, J.A.,** & Gazzaley, A. Perceptual and central interference in dual-task performance (2013). *Cognitive Neuroscience annual meeting, San Francisco, CA.*

Essoe, J., Rolle, C., Samaha, J., Bowen, K., **Anguera, J.A.,** & Gazzaley, A. Age-related differences in multitasking under working memory load (2013). *Cognitive Neuroscience annual meeting, San Francisco, CA.*

Rolle, C., Gugel, M., Jabbar, T., **Anguera, J.A.,** & Gazzaley, A. Restorative effects of nature image breaks on multitasking performance (2013). *Cognitive Neuroscience annual meeting, San Francisco, CA.*

Anguera, J.A., Boccanfuso, J., Rintoul, J.L., Al-Hashimi, O., Faraji, F., Janowich, J., Kong E., Laraburro, Y., Rolle, C., Johnston, E., & Gazzaley, A. Multitasking deficits across the adult lifespan and their remediation through videogame training (2012). *Society for Neuroscience annual meeting, New Orleans, LA.*

Anguera, J.A., Boccanfuso, J., Rintoul, J.L., Al-Hashimi, O., Kong, E., Cristo, Y., Faraji, F., Moustafa, R., Johnston, E., & Gazzaley, A. (2011). Training age-related multitasking deficits in older adults through an action driving video game. *Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, San Francisco, CA.*

Anguera, J.A., Rintoul, J.L., Al-Hashimi, O., Johnston, E., Faraji, F., Gazzaley A. (2010). Age-related changes in distraction & multitasking during a driving video game. *Society for Neuroscience annual meeting, San Diego, CA.*

Lyman, K., **Anguera, J.A.,** Gazzaley, A. (2010). Lyman, K., Age-related changes associated with response inhibition after effects. *Society for Neuroscience annual meeting, San Diego, CA.*

Benson, B.L., **Anguera, J.A.,** & Seidler, R.D. (2009). The effect of an explicit strategy on visuomotor adaptation. *Society for Neuroscience annual meeting, San Diego, CA.*

Anguera, J.A., Lyman, K., Gazzaley, A. (2010). Neural correlates of response inhibition after-effects. *Human Brain Mapping, Barcelona, Spain.*

Fling, B.W., Reuter-Lorenz, P.A., **Anguera, J.A.,** Bo, J., Langan, J., Welsh, R.C., Seidler, R.D. (2010). Age differences in callosal contributions to performance. *Human Brain Mapping, Barcelona, Spain.*

Lyman, K., **Anguera, J.A.,** Gazzaley, A., Terman, D. (2010). A mathematical model of human inhibitory control. *Computational Neuroscience Meeting, San Antonio, Texas.*

Benson, B.L., **Anguera, J.A.,** & Seidler, R.D. (2009). The effect of inter-trial interval on implicit and explicit visuomotor learning. *Society for Neuroscience annual meeting, Chicago, IL.*

Anguera, J.A., Yang, B. , Barbhaiya, N., Gazzaley A. (2009). The relationship between motor and sensory inhibition: an EEG study. *Society for Neuroscience annual meeting, Chicago, IL.*

Anguera, J.A., Reuter-Lorenz, P.A., Willingham, D.T., Noll, D.C., and Seidler, R.D. (2007). Contributions of spatial working memory to visuomotor adaptation in young and older adults. *Society for Neuroscience annual meeting, San Diego, CA.*

Anguera, J.A., Reuter-Lorenz, P.A., Willingham, D.T., Noll, D.C., and Seidler, R.D. (2007). Contributions of spatial working memory to visuomotor adaptation in young and older adults. *LIFE Fall Academy, Ann Arbor, MI.*

Anguera, J.A., Reuter-Lorenz, P.A., Willingham, D.T., Noll, D.C., and Seidler, R.D. (2007). Contributions of spatial working memory to visuomotor adaptation. *Human Brain Mapping, Chicago, IL.*

Anguera, J.A., P.A. Reuter-Lorenz, D.T. Willingham, D.C. Noll, and R.D. Seidler. (2007). Neural Mechanisms of Visuomotor Adaptation in Older Adults. *Second Annual Aging Research Symposium at University of Michigan, Ann Arbor, MI.*

Anguera, J.A., Reuter-Lorenz, P.A., Willingham, D.T., Noll, D.C., and Seidler, R.D. (2007). Contributions of spatial working memory to visuomotor adaptation. *Neural Control of Movement, Sevilla, Spain.*

Anguera, J.A., Reuter-Lorenz, P.A., Willingham, D.T., Noll, D.C., and Seidler, R.D. (2006). Contributions of spatial working memory to visuomotor adaptation. *Society for Neuroscience, Atlanta, GA.*

Anguera, J.A., Seidler, R.D., and Gehring, W.J. (2006). Changes in error monitoring during motor learning. *Cognitive Neuroscience, San Francisco, CA.*

Anguera, J.A., Seidler, R.D., and Gehring, W.J. (2005). Changes in error monitoring during motor learning. *Neural Control of Movement, Key Biscayne, FL.*

Anguera, J.A., Russell, C.A., Noll, D.C., and Seidler, R.D. (2004). Sensorimotor adaptation: neural correlates and intermanual transfer of learning.” *Society for Neuroscience, San Diego, CA.*

INVITED PRESENTATIONS

January 2021 *Attention and Brain Health.* UCSF School of Medicine, San Francisco, CA (ZOOM)

December 2020 *Cognitive Brain Health.* Brain Health for Life, BioCat Workshop, Barcelona (ZOOM)

October 2020 *Using Video Game Technology for Mental Health.* Institute on Aging, San Francisco, CA (ZOOM)

September 2019 *Assessing and enhancing cognitive control abilities in children using video game-like approaches,* Cortica Care Seminar Series, Larkspur, CA.

July 2019. *Using Video Game Technology for Mental Health.* Colloquium of Neurosciences, CHUV, Lausanne, Switzerland

July 2019. *Using Video Game Technology for Mental Health.* Department of Psychology, University of Glasgow, Scotland.

June 2019. *Leveraging Mobile Digital Technologies to Enhance Mental Health in Minority Populations.* 12th National Conference on Health Disparities, San Francisco, CA

December 2018. *Leveraging mobile technology to deliver & assess cognition amongst minority older adults,* CADC Scholars Meeting, San Francisco, CA

October 2018. Panel discussion for HopeLab on digital therapeutics. Marsh Theater, San Francisco, CA

September 2018. Panel discussion on research and administration. Research Administration Day, UCSF, San Francisco, CA

September 2018. *Leveraging Mobile Digital Technologies to Enhance Mental Health.* UCSF and UCB Colloquium on Depression and Mood-Related Research, San Francisco, CA

July 2018. (Event Keynote). Using EEG to quantify the enhancement of cognitive control deficits in older adults following video game training. International Conference on Brain-Inspired Cognitive System, Xi'an, China

April 2018. *The Unusual Journey Towards the Use of Video Games for Health.* Nifty Fifty Event, 5th USA Science and Engineering Festival, Gateway Middle School, San Francisco, CA

November 2017. *Recent Innovations in Mobile Health Interventions for Depression*. Association for Behavioral and Cognitive Therapies. San Diego, CA

October 2017. *Using Digital Health to Build Good Brain Health*. Apple, Cupertino, CA.

August 2017. *Cognitive training and brain health topics*. World Congress of Science and Factual Producers, San Francisco, CA.

June 2017. *Leveraging Mobile Technology to Enhance Cognitive control (and other facets) in older adults using video games*. ESRC funded Seminar on Cognitive Ageing, University of York, York, U.K.

May 2017. *Seminar Series on Cognitive Training*. Universidad de Mexicali, Mexico.

April 2017. *Leveraging Mobile Technology to Enhance Cognitive Health*. Society for Brain Mapping and Therapeutics, Los Angeles, CA.

April 2017. *Reprogramming the brain using video games*. UCSF Health & Wellness Center, San Francisco, CA.

March 2017. *Enhancing cognitive control in older adults using video games*. SF Aquatic Park, San Francisco, CA.

January 2017. *"Coffee & Science Seminar"*. Department of Gerontology Seminar Series, San Francisco, CA.

January 2017. *Enhancing cognitive control in older adults using video games*. OLLI UC Davis, Davis, CA.

September 2016. *Leveraging mobile technology to enhance cognitive health*. Trends in Neuroscience Technology, South San Francisco, CA

July 2016. *Leveraging mobile technology to enhance cognitive health*. NWABR/QR Conference, Seattle, WA

April 2016. *Leveraging mobile technology to enhance cognitive health*. RCMAR Annual Meeting, NIH, Washington D.C.

March 2016. *Reprogramming the brain using video games*. School of Nursing, San Francisco, CA

March 2016. *Using Digital Health to Build Good Brain Health*. US-UK Serious Games Workshop, Drexel University, PA

December 2015. *Reprogramming the brain using video games*. CAL-PT-FUND Research Symposium, San Francisco, CA

October 2015. *Using Digital Health to Build Good Brain Health*. Ginger.io Learning Hour. San Francisco, CA

September 2015. *Using Digital Health to Build Good Brain Health*. ISAT Hacking Creativity Workshop, Los Angeles, CA

September 2015. *Using Digital Health to Build Good Brain Health*. Center for Brain Health, Dallas, TX

June 2015. *Using video games & mobile devices to enhance cognitive & physical health*. USF "Always Active" Keynote Speaker. San Francisco, CA

June 2015. *Enhancing cognitive control using video games & mobile devices*. UCSF School of Medicine "Training the Mind" lecture series. San Francisco, CA

June 2015. *Leveraging mobile technology to enhance cognition in older adults*. CADC Board Meeting, San Francisco, CA

May 2015. *Enhancing cognitive control using video games & mobile devices*. Department of Psychology, University of San Francisco, CA

May 2015. *Using mobile technology to enhance cognition amongst depressed individuals*. California Association of Social Rehabilitation Agencies, Concord, CA.

March 2015. *Reprogramming the brain using video games & mobile devices*. Reprogramming the Human Brain, Berkeley, CA.

March 2015. *Enhancing cognitive control using video games & mobile devices*. International Convention of Psychological Science, Amsterdam, The Netherlands.

November 2014. *Using mobile technology to enhance cognitive control amongst depressed individuals*. E-Health Work Group, UCSF, CA

November 2014. *Mechanisms underlying cognitive & motor variability in children with sensory processing disorder*. Sensory Processing Disorder SWG Meeting, Arizona State, AZ

October, 2014. *Enhancing cognitive control using video games & mobile devices*. UCSF Memory & Aging Center, Grand Rounds, San Francisco, CA

February, 2014. *Enhancing cognitive control in older adults (and other populations) using video games*. OLLI UC Berkeley 4th Age Salon, Berkeley, CA.

February, 2014. *Enhancing cognitive control in older adults (and other populations) using video games*. Department of Neurology, Memory and Aging Center Cognitive Aging Retreat, UCSF, CA.

September, 2013. *Cognitive Contributions during Motor Learning & Interference Training*. Department of Psychology Forum, San Francisco State University, CA.

October, 2010. *Distinct Cognitive Contributions during Motor Learning/Performance*. Department of Epidemiology & Cancer Control, St. Jude Children's Research Hospital, Memphis, TN.

May, 2009. *Distinct Cognitive Contributions during Motor Learning/Performance*. Department of Biomedical Kinesiology, Katholic University of Leuven, Belgium.

October, 2007. *Contributions of Spatial Working Memory to Visuomotor Adaptation in Young and Older Adults*. University of Michigan Cognition and Perception Forum. Ann Arbor, MI.

May, 2007. *Neural Mechanisms of Visuomotor Adaptation in Older Adults*. LIFE Fall Academy Program, Berlin, Germany.

November, 2006. *Contributions of Spatial Working Memory to Visuomotor Adaptation*. Technical Assistance Workshop for Minority & Emerging Scientists, Dallas, TX.

UNIVERSITY TEACHING / PROFESSIONAL EXPERIENCE

2012 (Summer) – Psych 498: Cognitive Neuroscience

San Francisco State Univ.

- Led students through a new class at SFSU. Responsibilities include the organization and presentation of appropriate material for this required course, including lectures, quizzes, homework assignments, and examinations

2011 (Fall) – Psych 400: Introduction to Research in Psychology

San Francisco State Univ.

- Acting as teaching assistant for Dr. Ezequiel Morsella (SFSU). Responsible for original lectures given throughout the semester on various topics, holding office hours for students, and assisting with examination creation

2005-2006 – MVS 110: Motor Control

University of Michigan

- Responsible for the organization and presentation of appropriate material for this required course, including lectures and laboratory experiments, as well as quizzes, homework assignments, and examinations

2003-2005 – PE 310: Anatomy & Physiology

University of Michigan

- Responsible for the organization and presentation of appropriate material for this required course, including lectures and laboratory experiments, as well as quizzes, homework assignments, and examinations

2001-2003 – KIN 345 Biomechanics Laboratory

Cal State Univ., Northridge

- Organized and presented lecture material for each 2 hour weekly meeting as well as developed weekly quizzes, homework assignments, written assignments, and final examination
- Provided instruction regarding the use of equipment in the lab, including force plates, electromyography, and motion analysis systems

2001-2003 – KIN 124 Strength Training, KIN 125 Fitness for Life, KIN126 Basketball, KIN 131 Golf, KIN 250 Basketball for PE majors **Cal State Univ., Northridge**

- Creation of each class as a whole, including both daily activities, semester-long goals, weekly quizzes, homework assignments, written assignments, and final examination

1997-2001 - UCSD ORTHOMED- Exercise Physiologist/Athletic Trainer **Univ. of California, San Diego**

- Certified through UCSD School of Medicine to develop, evaluate, and incorporate rehabilitation programs for patients/clients seeking physical therapy via MED-X rehabilitation machinery
- Performed personal training duties, including the development, monitoring, and updating of each prescribed program for each client as well as the development of long-term nutrition plans for patients/clients

STUDENT MENTORING

2009-present

UC San Francisco

50+ students since 2009 from a variety of disciplines (Molecular and Cellular Biology, Neuroscience, Psychology, Mathematics, Bioengineering, Medicine): Mentoring involved the development of different projects, training on testing protocols, neuropsychological administration, data collection using both behavioral and neural measures, data analysis, writing a research proposal, and/or creating presentations of this work.

Medical/Postdoc/Graduate Students

- Omar Al-Hashimi, M.D. (UC Berkeley/UCSF)
- Jacqueline Boccanfuso, M.S. (UC San Diego)
- Diego Castaneda, Ph.D. (UCSF)
- Caoilainn Doyle, Ph.D. (Dublin City University)
- Vanessa Ferrel, M.D. (UCSD)
- Juliana de Souza, M.D., Ph.D. (UCSF/ Brazil)
- Maria Guerreiro, M.S. (Maastricht University, Netherlands)
- Yudy Larraburo, M.S. (SFSU)
- Gang Li, Ph.D. (UCSF/Shanghai Jiao Tong University, China)
- Cheri Mah, M.D., (UCSF)
- Aysha Mushtaq, M.D. (Medical University of South Carolina)
- Grace Niu, Ph.D. (UCSF)
- Abhishek Pratap, M.S. (Univ. of Washington)
- Arseny Sokolov, M.D. (UCSF)
- Arul Thangavel, M.D. (UCSF/Switzerland)

Undergraduate Students

- Annie Brandes-Aitken, B.S. (UC Davis)
- Savannah Aubinoe, B.S. (USF)
- Jorge Avila, B.S. (UC Davis)
- Caleb Banks, B.S. (USF)
- Namrata Barbahiya, B.S. (UC Berkeley)
- Melissa Bromley, B.S. (UC Berkeley)
- Richard Campusano, B.S. (UC Santa Cruz)
- Adrianna Carrasco, B.S. (UC Berkeley)
- Alana Colville, B.S., (Univ. of Oregon)
- Mandy Chan, B.S. (USF)
- Shivani Desai, B.S. (UC Davis)
- Alan Duanmu, B.S. (Univ. of Michigan)
- Thomas Egan, B.S. (Occidental University)
- Joey Essoe, B.S. (SFSU)
- Alexandra Ewencyk, B.S. (Brown)
- Farshid Faraji, B.S. (UC Berkeley)
- Meike Gugel, B.S. (Univ. of Cologne, Germany)
- Rakh Hargett B.S. (Warren Wilson College)
- Jacqueline Janowich, B.S. (Colgate University)
- Samirah Javed, B.S. (SFSU)
- Joshua Jordan, B.S. (UC Davis)
- Dan Kingsbrook, B.S. (UC Berkeley)

- Kiya Komaniko, B.S. (Mills College)
- Erwin Kong, B.S. (UC Davis)
- Kyle Lyman, B.S. (The Ohio State University)
- Radwa Moustafa, B.S. (UC Santa Cruz)
- Yasha Rezaeihaghighi, B.S. (UC Los Angeles)
- Jennifer Ringler, B.S. (UC Berkeley)
- Jordin Rodondi, B.S. (USF)
- Cammie Rolle, B.S. (UC Davis)
- Juliann Record, B.S. (University of Texas)
- Allyce Rusnak, B.S. (Full Sail Univ.)
- Jason Samaha, B.S. (SFSU)
- Jessica Schachtner, B.S. (USF)
- A.J. Simon, B.S., (SFSU)
- Sasha Skinner, B.S. (UC Berkeley)
- Pedro Szybel, B.S. (SFSU)
- Adam Thompson, B.S. (UC SB)
- Josh Volponi, B.S. (UC Berkeley)
- Carol Vong, B.S. (UC Berkeley)
- Anrey Wang, B.S. (Oberlin College)
- Emilie Robert Wong, B.S. (Harvard)
- Betty Yang, B.S. (UC Berkeley)
- Dan Yerukhimov, B.S. (UC Berkeley)

2004-2008

University of Michigan

10 students from a variety of disciplines (Kinesiology, Psychology, Neuroscience, Mathematics, AFAR Medical Student): Assisted students with project development, trained them on testing protocols, neuropsychological administration, data analysis, writing a research proposal, and/or creating presentations of their work.

Medical Student

- Tim Mitchell, M.D. (New York Medical College)

Undergraduate Students

- Bryan Benson, B.S.
- Hasan Cheema, B.S.
- Steve Crafton, B.S.
- Kamran Haydar, B.S.
- Katherine Popadokus, B.S.
- Clare Porter, B.S.
- Colleen Russell, B.S.
- Adam Savine, B.S.
- Carla Teruz, B.S.

HONORS/AWARDS

2019 UCSF RAP Diversity Supplements Award

2017 UCSF Faculty Enrichment Award for Seminar Series Grant (Neurology | Neuroscape)

2014 UCSF Center for Aging in Diverse Communities (CADC) Grant

2014 UCSF School of Medicine Technology Transformation Grant

2014 UCSF 150th Anniversary “Young Innovator Awardee”

2013-2014 NIH Loan Repayment Program recipient

2013 IMFAR Travel Award Recipient

2012 NIGMS Workshop for Postdocs Transitioning to Independent Positions [competitive application]

2011-2013 NIH Loan Repayment Program recipient

2011 Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference Presentation Award

2010-2013 UCSF Institutional Research and Career Development Award (IRACDA) (3 years of salary + benefits)

2010 UCSF Postdoctoral Conference Travel Award

2009-2010 Minority Postdoctoral Supplement for Underrepresented Minorities (NIH; 2 years salary + benefits)

2007 ERP Bootcamp Participant, UC Davis [competitive application]

2007 Rackham Graduate Student Dissertation Research Grant

2007 Neural Control of Movement Conference Student Fellowship Award

2006 Technical Assistance Workshop for Minority & Emerging Scientists, Dallas, TX (NIH; all travel expenses)

2006-2008 Minority Predoctoral Supplement for Underrepresented Minorities (NIH; 3 years salary + benefits)

2003-2005 Division of Kinesiology Fellowship

2003 Division of Kinesiology Spring/Summer Fellowship

2003 Masters of Science with Distinction

2002-2003 Graduate Equity Fellowship CSUN

2001-2003 Graduate Teaching Associate Fellowship, CSUN

2001-2003 Dean's List (all 4 semesters), CSUN

2000 Dean's List (Fall, Winter quarters), UCSD

1999 Dean's List (Spring, Winter quarters), UCSD

PROFESSIONAL AFFILIATIONS / SERVICE ACTIVITIES

- 2016-present Host of the Digital Health Core Seminar Series in Psychiatry
- 2019- Host (via Digital Health Core) of HackMentalHealth
- 2017-2018: IEEE Brain Data Bank Hackathon Host
- 2018: Judge for UCSF PostDoc Slam
- 2016: Co-Chair of Neuro2025 UCSF Department of Neurology Technology Committee
- 2014: Panasonic IBM Health Jam facilitator
- 2013: Ambassador for UCSF 2.0 'An Experiment to Identify Bold Ideas for the Future'
- 2012: Demonstrator: UCSF Memory & Aging Center 'Mini-Medical School'
- 2012-present: UCSF SACNAS chapter
- 2011-present: NIH LRP Ambassador Network
- 2011-present: Blogger for SharpBrains.com [<http://www.sharpbrains.com/>]
- 2008-2009: Graduate student representative for Division of Kinesiology Dean Search Committee
- 2007-present: Human Brain Mapping, member
- 2006-2008: LIFE collaborative international graduate training program
- 2006-present: Gerontological Society of America, member
- 2006-present: The American Physiological Society, member
- 2006-present: Cognitive Neuroscience Society, member
- 2005-present: "Talk to a real scientist!", Compton, CA
- 2003; 2005: Brain's Rule! Ann Arbor Hands-On Museum
- 2003-present: The Society for the Neural Control of Movement, member
- 2003-present: The Society for Neuroscience, member

AD HOC REVIEWING

- Assessment
- Behavioral Neurology
- Behavioral Neuroscience
- Brain Research
- Computers and Education
- Cerebral Cortex
- Developmental Neurophysiology
- European Journal of Psychology of Education

- European Journal of Neuroscience
- Experimental Brain Research
- Frontiers in Psychology
- Games for Digital Health
- Geriatric Psychological Society
- Gerontology and Geriatric Medicine
- Journal of the American Aging Association (AGE)
- Journal of Cognitive Neuroscience
- Journal of Medical Internet Research
- Journal of Neurophysiology
- Journal of Neuroscience
- Journal of Psychophysiology
- International Journal of Psychophysiology
- Neuropsychologia
- Neuroimage
- Neuroscience Letters
- PLOS ONE
- Psychology and Aging
- Social Cognitive and Affective Neuroscience
- Spanish Journal of Psychology
- Trends in Cognitive Neuroscience