

SOOK-LEI LIEW

1540 Alcazar St., CHP 133, Los Angeles, CA 90089-9003 • Phone: 323-442-0315 • Email: sliew@usc.edu

EMPLOYMENT

- 2015-present** **Assistant Professor**
Chan Division of Occupational Science & Occupational Therapy,
Division of Biokinesiology & Physical Therapy, Ostrow School of Dentistry
Department of Neurology, Keck School of Medicine
Faculty, Neuroscience Graduate Program
Affiliate, Mark and Mary Stevens Neuroimaging and Informatics Institute
University of Southern California
- 2015 – present** **Director**
Neural Plasticity and Neurorehabilitation Laboratory
University of Southern California

EDUCATION & TRAINING

- 2012-2014** **Postdoctoral Fellow**
Human Cortical Physiology & Stroke Neurorehabilitation Section
National Institute of Neurological Disorders and Stroke, National Institutes of Health
Advisor: Dr. Leonardo Cohen
- 2014** **Visiting Research Fellow**
Human Brain Physiology and Stimulation Laboratory
Department of Physical Medicine and Rehabilitation
Johns Hopkins School of Medicine
Advisor: Dr. Pablo Celnik
- 2013** **Visiting Research Fellow**
Applied Neurotechnology Laboratory
Institute of Medical Psychology and Behavioral Neurobiology
University of Tübingen
Advisor: Dr. Niels Birbaumer & Dr. Surjo Soekadar
- 2008-2012** **Ph.D.**
Division of Occupational Therapy & Occupational Science, concentration in
Cognitive Neuroscience
The Brain and Creativity Institute
University of Southern California
Advisor: Dr. Lisa Aziz-Zadeh
- 2006-2008** **M.A. in Occupational Therapy**
Division of Occupational Therapy & Occupational Science
University of Southern California
- 2002-2006** **B.A. in Kinesiology and English, magna cum laude**
Department of Kinesiology, concentration in Sports Medicine
Department of English
Rice University

GRANTS & FELLOWSHIPS

- 2016** **AHA National Innovative Research Grant**
16IRG26960017

Title: "REINVENT: A Closed-Loop VR Neurofeedback System for Motor Recovery after Severe Stroke"
Period of Support Offered: January 2016 to December 2017
Agency: American Heart Association
Total Offered: \$149,446.00
PI: Sook-Lei Liew, PhD, OTR/L
Role: PI

2015 **NIH K12 Grant: Rehabilitation Research Career Development Program**
K12 HD 055929
Title: "Noninvasive Brain Stimulation and Neuroimaging to Characterize and Stimulate Recovery after Stroke"
Period of Support Offered: January 2015 to August 2020
Agency: NIH/NICHHD/NCMRR, NIH/NINDS
Total Offered: ~\$375,000
PI: Kenneth J. Ottenbacher, Ph.D., OTR/L
Role: Scholar

2014 **NIH NINDS Intramural Competitive Fellowship Award**
Title: "Real-time fMRI Neurofeedback for Motor Recovery after Stroke"
Period of Support Offered: May 2014 to April 2017
Agency: NINDS/NIH
Total Offered: ~\$147,660
PI: Sook-Lei Liew
Role: Principal Investigator

2013 **German Academic Exchange Service (DAAD) Research Grant**
Title: "Real-time fMRI Neurofeedback for Motor Recovery After Stroke"
Period of Support: September 2013 to October 2013
Agency: German Academic Exchange Service (DAAD)
Total: \$3,000
PI: Sook-Lei Liew
Role: Principal investigator

2009-2012 **National Science Foundation Graduate Research Fellowship**
NSF Award #2009072048
Period of Support: August 2009 to July 2012
Agency: National Science Foundation
Total: ~\$124,000
PI: Sook-Lei Liew
Role: Principal investigator

2008-2010 **University of Southern California Provost's Ph.D. Fellowship**
Period of Support Offered: June 2008 to May 2010
Agency: University of Southern California
Total Offered: ~\$120,000
PI: Sook-Lei Liew
Role: Principal investigator

2008 **National Science Foundation East Asia & Pacific Summer Institute**
Title: "Cultural Effects on the Neural Substrates for Empathy"

NSF Award #0813067
Period of Support: June 2008 to May 2009
Agency: National Science Foundation
Total: \$5,637
PI: Sook-Lei Liew
Role: Principal investigator

AWARDS & HONORS

- 2016** **Fellow**, American Heart Association Research Leaders Academy
- 2015** **Scholar**, NIH Loan Repayment Program Awardee for Clinical Research
- 2015** **Fellow**, Training in Grantsmanship for Rehabilitation Research (TIGRR) Workshop
- 2012** **Award**, USC Penelope Louise Richardson Award for outstanding potential in fulfilling the role of a faculty member
- 2012** **Awards**, USC Provost PhD Travel Award; OT Division Leadership Travel Award
- 2011** **Fellow**, FENS-IBRO Imaging Training Center, Lausanne/Geneva, Switzerland
- 2011** **Fellow**, UCLA Advanced Neuroimaging Training Program (NITP) Summer Course, Los Angeles, CA
- 2010** **Fellow**, Riken Brain Science Institute Summer Program, Tokyo, Japan
- 2010** **Chair**, National Science Foundation East Asia and Pacific Summer Institutes Alumni Panel, Washington D.C.
- 2008, 2011, 2012** **First Place**, USC School of Dentistry Research Day, Occupational Science Division
- 2009, 2010** **Second Place**, USC School of Dentistry Research Day, Occupational Science Division
- 2009** **Fellow**, Summer Institute in Cognitive Neuroscience, Santa Barbara, CA
- 2008** **Fellow**, National Science Foundation East Asia and Pacific Summer Institutes
- 2008** **Award**, USC Elizabeth June Yerxa Award for Excellence in Research
- 2008-2009** **Award**, USC Graduate Professionalism Initiative
- 2006-2008** **Scholarships & Honors (Masters Degree)**, Asia Pacific Occupational Therapy Congress (APOTC) Travel Award, Hong Kong, 2008; International Society of Occupational Science Student Delegate, 2007; Phi Theta Epsilon (National Occupational Therapy Honor Society), 2007-2008
- 2002-2006** **College Scholarships & Honors (Bachelors Degree)**, National Merit Scholarship, Freeman ASIA Scholarship, Target All-Around Scholarship, Rice University Humanities Scholarship, Rice University President's Honor Roll, Rice Academic Fellow, National Society of Collegiate Scholars

PUBLICATIONS (* denotes equal contributions; ** denotes senior/corresponding author)

- Sugiyama, T., & **Liew, S.-L.**** (In press). The effects and mechanisms of different sensory contexts on motor learning. *Journal of Motor Behavior*.
- Ito, K., & **Liew, S.-L.**** (In press). Calculating the laterality index using FSL for stroke neuroimaging data. *Proc Brainhack Americas, GigaScience*.
- Kan, E., Anglin, J., Borich, M., Jahanshad, N., Thompson, P., & **Liew, S.-L.**** (In press). Facilitating big data meta-analyses for clinical neuroimaging through ENIGMA wrapper scripts. *Proc Brainhack Americas, GigaScience*.
- Craddock R, S. Margulies D, Bellec P, Nolan Nichols B, Alcauter S, A. Barrios F, Burnod Y, J. Cannistraci C, Cohen-Adad J, De Leener B, Dery S, Downar J, Dunlop K, R. Franco A, Seligman Froehlich C, J. Gerber A, S. Ghosh S, J. Grabowski T, Hill S, Sólón Heinsfeld A, Matthew Hutchison R, Kundu P, R. Laird A, **Liew S-L**, J. Lurie D, G. McLaren D, Meneguzzi F, Mennes M, Mesmoudi S, O'Connor D, H. Pasaye E, Peltier S, Poline J-B, Prasad G, Fraga Pereira R, Quirion P-O, Rokem A, S. Saad Z, Shi Y, C. Strother S, Toro R, Q. Uddin L, D. Van Horn J, W. Van Meter J, C. Welsh R, Xu T. (2016) Brainhack: A collaborative workshop for the open neuroscience community. *GigaScience* 5:1-8.
- Buch, E.*, **Liew, S.-L.***, & Cohen, L. (2016). Plasticity of sensorimotor networks: Multiple overlapping

mechanisms. *The Neuroscientist*, doi:10.1177/1073858416638641

- Liew, S.-L.**, Rana, M., Cornelsen, S., Furtunato de Barros Filho, M., Birbaumer, N., Sitaram, R., Cohen, L., & Soekadar, S. (2015). Improving motor cortico-thalamic communication after stroke using real-time fMRI connectivity-based neurofeedback. *Neurorehabilitation and Neural Repair*, doi:10.1177/1545968315619699.
- Liew, S.-L.**, Santarnecchi, E., Buch, E. & Cohen, L. (2014). Noninvasive brain stimulation (NIBS) in neurorehabilitation: Local and distant effects for motor recovery. *Frontiers in Human Neuroscience*, 8, 378. [Special Issue on Neurorehabilitation & Neuroplasticity edited by Dr. Edward Taub]
- Liew, S.-L.**, Agashe, H., Bhagat, N., Paek, A., & Bulea, T.C. (2013). A clinical roadmap for brain-neural machine interfaces: Trainees Perspectives on the 2013 International Workshop. *Pulse IEEE*, 4(5), 44-48.
- Liew, S.-L.**, Sheng, T., Margetis, J. & Aziz-Zadeh, L. (2013). Both novelty and expertise increase action observation network activity. *Frontiers in Human Neuroscience*, 7, 541.
- Garrison, K.A., Wong, S., **Liew, S.-L.**, Aziz-Zadeh, L., & Winstein, C. (2013) Modulating the motor system by action observation after stroke. *Stroke*. doi: 10.1161/STROKEAHA.113.001105
- Liew, S.-L.** Sheng, T. & Aziz-Zadeh, L. (2013). Experience with an amputee modulates one's own sensorimotor regions during action observation. *Neuroimage*, 69, 138-145. doi:10.1016/j.neuroimage.2012.12.028
- Liew, S.-L.** & Aziz-Zadeh, L. (2012). The mirror neuron system, social control, and language. [Book chapter]. In: *Handbook of Neurosociology*. Editor: Franks, D. & Turner, J.H.
- Liew, S.-L.**, Garrison, K., Werner, J., & Aziz-Zadeh, L. (2012). The mirror neuron system: Innovations and implications for occupational therapy. *OTJR: Occupation, Participation, and Health*. doi: 10.3928/15394492-20111209-01
- Aziz-Zadeh, L., **Liew, S.-L.**, & Dandekar, F. (2012). The neural correlates of visual creativity. *Social Cognitive Affective Neuroscience*, 8(4), 475-80.
- Johnson, A., **Liew, S.-L.**, & Aziz-Zadeh, L. (2011). Demographics, learning, and imitation, and body schema in Body Integrity Identity Disorder. *Indiana University Undergraduate Journal of Cognitive Science*, 6:8-15. [Mentored undergraduate]
- Aziz-Zadeh, L., Sheng, T., **Liew, S.-L.**, & Damasio, H. (2011). Understanding otherness: The neural basis of action understanding and empathy in a congenital amputee. *Cerebral Cortex*, 22(4), 811-9. doi:10.1093/cercor/bhr139
- Liew, S.-L.**, & Aziz-Zadeh, L. (2011). The neuroscience of language in occupations: A review of findings from brain and behavioral sciences. *Journal of Occupational Science*, 18(2), 97-114.
- Liew, S.-L.** & Aziz-Zadeh, L. (2011). The mirror neuron system and social cognition. [Book chapter]. In: *From DNA to Social Cognition*. Editors: Ebstein, Shamay-Tsoory, & Chew.
- Liew, S.-L.**, Ma, Y., Han, S., & Aziz-Zadeh, L. (2011). Who's afraid of the boss: Cultural differences in social hierarchies modulate self-face recognition in Chinese and Americans. *PLoS ONE* 6(2): e16901. doi:10.1371/journal.pone.0016901
- Liew, S.-L.**, Han, S., & Aziz-Zadeh, L. (2011). Familiarity modulates mirror neuron and mentalizing regions during intention understanding. *Human Brain Mapping*. 32, 1986-1997. doi: 10.1002/hbm.21164

INVITED PRESENTATIONS

- Liew, S.-L.** (Accepted for presentation 2016, November). 'Big data' for rehabilitation: Promises, pitfalls, and future potential. Invited oral symposium (chair and speaker). American Society for Neurorehabilitation. San Diego, CA.
- Liew, S.-L.** (2016, July). Big data neuroimaging, functional brain stimulation, and virtual reality for stroke. Invited oral presentation, OT Practice Issues Forum, Cedars Sinai Health Systems, Los Angeles, CA.
- Liew, S.-L.** (2016, July). Transcranial electrical stimulation: Methods and applications. Invited oral presentation, USC Noninvasive Brain Stimulation Methods Course, Los Angeles, CA.
- Liew, S.-L.**, (2016, June). ENIGMA Stroke Recovery. Invited oral presentation, ENIGMA Leaders Planning Meeting, Geneva, Switzerland.
- Liew, S.-L.** (2016, May). ENIGMA Stroke Recovery: Using big data neuroimaging to predict motor recovery. Invited oral presentation. OT Summit of Scholars, Pittsburgh, PA.
- Liew, S.-L.** (2016, March). ENIGMA Stroke Recovery. Invited oral presentation. USC Imaging Genetics Center, Los Angeles, CA.
- Liew, S.-L.** (2015, October). Brain computer interfaces and real-time fMRI for neurorehabilitation.

- Invited oral presentation, USC Neuroimaging and Informatics Program, Los Angeles, CA.
- Liew, S.-L.** (2015, July). New and emerging technologies for clients with motor impairments due to neurological injury. Invited oral presentation, USC SOTI Program, Los Angeles, CA.
- Liew, S.-L.,** Thompson, T., Ramirez, J.J., Butcher, P., Cohen, L., Taylor, J.A., & Celnik, P.A. (2015, May). Anodal Transcranial Direct Current Stimulation of Dorsolateral Prefrontal Cortex and Cerebellum Enhance Visuomotor Adaptation. Invited oral presentation, OT Summit of Scholars, Los Angeles, CA.
- Liew, S.-L.** (2015, March). Neuromodulation of the human motor system and implications for stroke rehabilitation. Keynote Speaker, School of Dentistry Research Day, University of Southern California, Los Angeles, CA.
- Liew, S.-L.** (2015, February). Neuromodulation of the human motor system in healthy individuals and individuals after stroke. Biokinesiology Neurorehabilitation Seminar Faculty Tutorial, University of Southern California, Los Angeles, CA.
- Liew, S.-L.** (2015, February). Neuromodulation of the human motor system to enhance learning. Invited presentation, Center of Excellence for Visual and Neurocognitive Rehabilitation, Emory University/Atlanta VA, Atlanta, Georgia.
- Liew, S.-L.,** Thompson, T., Ramirez, J.J., Butcher, P., Cohen, L., Taylor, J.A., & Celnik, P.A. (2014, December). Anodal tDCS of prefrontal cortex and cerebellum enhance different aspects of motor learning in a visuomotor adaptation task. Invited oral presentation, Sensorimotor Research Day, Johns Hopkins University, Baltimore, MD.
- Liew, S.-L.,** Gonzalez-Castillo, J., Horovitz, S., Roopchansingh, V., Tinaz, S., Hallett, M., & Cohen, L.G. (2014, May). Using neurofeedback from real-time fMRI connectivity patterns to enhance skilled motor performance. Invited oral presentation. OT Summit of Scholars, Philadelphia, PA.
- Liew, S.-L.,** Soekadar, S., & Cohen, L. (2014, April). Brain computer interfaces (BCIs) for neurorehabilitation: Evidence and applications for occupational therapy. Invited short course, American Occupational Therapy Association Annual Meeting, Baltimore, MD.
- Liew, S.-L.** (2014, April). *New and emerging technologies for clients with motor impairments due to neurological injury.* Invited presentation for Occupational Therapy Lunch with a Scholar, Johns Hopkins University, Baltimore, MD.
- Liew, S.-L.** (2014, February). *New and emerging technologies for clients with motor impairments due to neurological injury.* Invited alumni presentation, University of Southern California, Los Angeles, CA.
- Liew, S.-L.** (2014, February). *Modulating the motor network in healthy individuals and after stroke.* Invited presentation, University of Southern California, Los Angeles, CA.
- Liew, S.-L.** (2014, February). *Modulating the motor network in healthy individuals and after stroke.* Invited presentation, Washington University School of Medicine, St. Louis, MO.
- Liew, S.-L.** (2013, December). *Modulating the motor network in healthy individuals and after stroke.* Invited presentation, University of Washington, Seattle, WA.
- Liew, S.-L.** (2013, August). *Modulating the motor network in healthy individuals and after stroke.* Invited presentation, The Ohio State University, Columbus, OH.
- Liew, S.-L.** (2013, April). *Engaging the action observation network in healthy controls and individuals with stroke.* Invited presentation, Dr. Pablo Celnik, Johns Hopkins University, Baltimore, MD.
- Liew, S.-L.** (2013, April). *Stroke and the action observation network.* Invited presentation, American Occupational Therapy Association Annual Meeting, San Diego, CA.
- Liew, S.-L.** (2013, March). *New advances in stroke research.* Invited presentation, UCLA Southern California Stroke Recovery Group, Los Angeles, CA.
- Liew, S.-L.** (2012, September). *Action observation and motor-related networks in chronic stroke patients.* Dr. Michelle Harris-Love, National Rehabilitation Hospital & Georgetown University, Washington D.C.
- Liew, S.-L.,** & Clewett, D. (2012, May). *Arterial spin labeling.* USC Neuroimaging Workshop, University of Southern California, Los Angeles, CA.
- Liew, S.-L.** (2012, March). *The mirror neuron system and clinical implications.* Guest lecturer, University of Southern California, Los Angeles, CA.
- Liew, S.-L.** (2012, February). *Cultural influences on social cognition.* Guest lecturer, University of Southern California, Los Angeles, CA.
- Liew, S.-L.** (2011, November). *Experience-dependent modulations of action observation networks in healthy and clinical populations.* Dr. Leonardo Cohen, National Institute of Neurological Disorders and Stroke, NIH, Bethesda, MD.

- Liew, S.-L.** (2011, October). *Experience and the action observation network*. Social Cognitive Neuroscience Laboratory, Dr. Matthew Lieberman, UCLA, Los Angeles, CA.
- Liew, S.-L.** (2011, October). *Experience-dependent modulations of action observation networks in healthy and clinical populations*. Virginia Tech Carilion Research Institute, Roanoke, VA.
- Liew, S.-L.** (2011, September). *Who's the Boss: Cross-cultural differences in the workplace*. Invited speaker at Mindshare LA, general public audience of over 350. Los Angeles, CA.
- Liew, S.-L.** (2011, June, August). *Introduction to Neuroimaging Tools | fMRI Preprocessing Methods*. USC Neuroimaging Workshop(s), Los Angeles, CA.
- Liew, S.-L.** (2010, July). *Action understanding of physically different others and empathy correlations*. Selected student speaker at the Riken BSI Summer Program, Tokyo, Japan.
- Liew, S.-L.** (2010, April). *The EAPSI experience*. Invited chair of the alumni panel at the National Science Foundation's East Asia & Pacific Summer Institutes. Washington, DC.
- Liew, S.-L. & Aziz-Zadeh, L.** (2010, March). *The neuroscience of daily social interactions*. Invited speaker at the USC Occupational Science 22nd Annual Symposium, Los Angeles, CA.
- Liew, S.-L. & Aziz-Zadeh, L.** (2009, October). *Playing with words: The active role of language in everyday occupations*. Invited presentation at the Society for the Study of Occupations: USA Annual Meeting, New Haven, CT.
- Liew, S.-L.** (2009, April). *EAPSI China*. Invited alumni speaker at the National Science Foundation's East Asia & Pacific Summer Institutes, Washington, DC.

SELECTED CONFERENCE PROCEEDINGS

- Liew, S.-L.,** Jahanshad, N., Anglin, J., Khoshab, N., Kim, B., Nakamura, W., Nhong, H., Rondina, J., Tran, C., Borich, Mc., Boyd, L., Byblow, W., Dimyan, M., Ermer, E., Lang, C., Li, J., Nichols, T., Roberts, P., Sanossian, N., Soekadar S., Stinear, C., Ward, N., Westlye, L. T., Winstein, C., Wittenberg, G. F., Cramer, S. C., & Thompson, P. M. (Submitted). *ENIGMA Stroke Recovery: Big data neuroimaging to predict motor recovery*. *Society for Neuroscience*, San Diego, CA.
- Liew, S.-L.,** Jahanshad, N., Anglin, J., Khoshab, N., Kim, B., Nakamura, W., Nhong, H., Rondina, J., Tran, C., Borich, Mc., Boyd, L., Dimyan, M., Ermer, E., Lang, C., Li, J., Nichols, T., Roberts, P., Sanossian, N., Soekadar S., Ward, N., Westlye, L. T., Winstein, C., Wittenberg, G. F., Cramer, S. C., & Thompson, P. M. (2016, June). *ENIGMA Stroke Recovery: Big data neuroimaging to predict motor recovery*. *Organization for Human Brain Mapping Annual Meeting*, Geneva, Switzerland.
- Liew, S.-L.,** Jahanshad, N., Anglin, J., Khoshab, N., Kim, B., Nakamura, W., Nhong, H., Rondina, J., Tran, C., Borich, Mc., Boyd, L., Dimyan, M., Ermer, E., Lang, C., Li, J., Nichols, T., Roberts, P., Sanossian, N., Soekadar S., Ward, N., Westlye, L. T., Winstein, C., Wittenberg, G. F., Cramer, S. C., & Thompson, P. M. (2016, May). *ENIGMA Stroke Recovery: Big data neuroimaging to predict motor recovery*. *NCMRR Moving Rehabilitation Forward Meeting*, Bethesda, MD.
- Liew, S.-L.,** Thompson, T., Ramirez, J.J., Butcher, P., Taylor, J.A., & Celnik, P.A. (2015, October). *Difficulty of visual transformation modulates the contributions of explicit and implicit learning with and without tDCS*. *Society for Neuroscience*, Chicago, IL.
- Dayan, E., Lopez-Alonso, V., **Liew, S.-L.,** & Cohen, L.G. (2015, October). *Distributed anatomical substrates identified by pattern classification predict cortical excitability and inhibition*. *Society for Neuroscience*, Chicago, IL.
- Dayan, E., **Liew, S.-L.,** & Cohen, L.G. (2015, June). *Modular organization of reward networks in the human brain*. *Organization for Human Brain Mapping*, Honolulu, HI.
- Liew, S.-L.,** Rana, M., Cornelsen, S., Furtunato de Barros Filho, M., Birbaumer, N., Sitaram, R., Cohen, L., & Soekadar, S. (2015, February). *Improving cortico-subcortical communication after stroke*. *Real-time functional imaging and neurofeedback*, Gainesville, FL.
- Liew, S.-L.,** Ramirez, J.J., Butcher, P., Cohen, L., Taylor, J.A., & Celnik, P.A. (2014, November). *Anodal tDCS of prefrontal cortex and cerebellum enhance different aspects of motor learning in a visuomotor adaptation task*. *Society for Neuroscience*, Washington, D.C.
- Liew, S.-L.,** Gonzalez-Castillo, J., Horovitz, S., Roopchansingh, V., Tinaz, S., Hallett, M., & Cohen, L.G. (2013, November). *Using neurofeedback from real-time fMRI connectivity patterns to enhance skilled motor performance*. [Abstract]. *Society for Neuroscience*, San Diego, CA. Selected for Neuroscience 2013 Hot Topics.
- Liew, S.-L.,** Garrison, K., Winstein, C., Cohen, L. & Aziz-Zadeh, L. (2013, June). *Functional connectivity of the action observation network after stroke*. [Abstract]. *Organization of Human Brain Mapping*, Seattle, WA.

- Liew, S.-L.**, Sheng, T., & Aziz-Zadeh, L. (2012, June). Observing actions performed by a congenital amputee activates one's own sensorimotor regions. [Abstract]. *Organization of Human Brain Mapping*, Beijing, China.
- Liew, S.-L.**, Garrison, K.A., Haldar, J., Winstein, C.J., Damasio, H., & Aziz-Zadeh, L. (2012, April). The mirror neuron system: Implications for occupational therapy and stroke rehabilitation. [Abstract]. *American Occupational Therapy Association Annual Meeting*, Indianapolis, IN.
- Liew, S.-L.**, Garrison, K.A., Haldar, J., Roh, A., Winstein, C.J., Damasio, H., & Aziz-Zadeh, L. (2012, February). Structural neuroanatomy of lesioned brains in chronic stroke patients and correlations with functional activation of motor-related neural networks. [Abstract]. *USC School of Dentistry Research Day*, Los Angeles, CA. Awarded First Place in division.
- Liew, S.-L.**, Garrison, K.A., Haldar, J., Winstein, C.J., Damasio, H., & Aziz-Zadeh, L. (2011, November). Structural neuroanatomy of lesioned brains in chronic stroke patients and correlations with functional activation of motor-related neural networks. [Abstract]. *Society for Neuroscience Annual Meeting*. Washington, D.C.
- Liew, S.-L.**, Garrison, K.A., Damasio, H., & Aziz-Zadeh, L. (2011, August). Experience and action observation networks in the brain: Integrating findings across physical differences and physical disability. [Abstract]. *FENS-IBRO Imaging Training Center*, Lausanne/Geneva, Switzerland.
- Liew, S.-L.**, Seckin, M., & Aziz-Zadeh, L. (2011, April). The effects of experience on the observation of novel effectors and empathy correlations. [Abstract]. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, CA.
- Liew, S.-L.**, Seckin, M., Johnson, A. & Aziz-Zadeh, L. (2011, February). The role of experience in understanding physically different others. [Abstract]. *USC School of Dentistry Research Day*, Los Angeles, CA. Awarded First Place in division.
- Liew, S.-L.**, Seckin, M., & Aziz-Zadeh, L. (2011, January). Action observation of a physically different individual: An fMRI study of visual experience. [Abstract]. *Experiment Psychology Society*, London, UK.
- Liew, S.-L.**, Dandekar, F., Epstein, D., & Aziz-Zadeh, L. (2010, November). The neural correlates of visual creativity. [Abstract]. *Society for Neuroscience Annual Meeting*. San Diego, CA.
- Liew, S.-L.**, Sheng, T., & Aziz-Zadeh, L. (2010, April). The neural correlates of stigma for physical differences. [Abstract]. *Cognitive Neuroscience Society Annual Meeting*, Montreal, Canada.
- Liew, S.-L.**, Sheng, T., & Aziz-Zadeh, L. (2010, February). The neural correlates of observing physical differences and empathy correlations. [Abstract]. *USC School of Dentistry Research Day*, Los Angeles, CA. Awarded Second Place in division.
- Liew, S.-L.**, Han, S., & Aziz-Zadeh, L. (2009, October). Activation of mirror neuron and theory of mind systems is modulated by familiarity and individual differences in empathy. [Abstract]. *Society for Neuroscience Annual Meeting*, Chicago, IL.
- Liew, S.-L.**, Aziz-Zadeh, L., & Han, S. (2009, April). Out of hand: How experience and race modulate neural correlates of gesture observation. [Abstract]. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, CA.
- Liew, S.-L.**, Sheng, T., & Aziz-Zadeh, L. (2009, February). Mission impossible: An fMRI study of motor empathy for impossible actions in a woman with congenital limb deficiencies. [Abstract]. *USC School of Dentistry Research Day*, Los Angeles, CA. Awarded Second Place in division.
- Aziz-Zadeh, L., Sheng, T., **Liew, S.-L.**, Bukowski, H., Damasio, H., & Damasio, A. (2009, April). Understanding and empathizing with dissimilar others: A case study of a congenital amputee. [Abstract]. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, CA.

TEACHING & MENTORING EXPERIENCE

- 2015-** **PhD Committee Chair**, Student: Taisei Sugiyama, PI: Sook-Lei Liew, PhD, OTR/L, Program: Occupational Science
- 2015-** **PhD Committee Chair**, Student: Matthew Ellis, PI: Judy Pa, PhD, Program: Neuroscience Graduate Program
- 2015-** **PhD Committee Member**, Student: Sonja Fenske, PI: Jason Kutch, PhD, Program: Neuroscience Graduate Program
- 2015-** **Graduate-Level Mentorship**
Kaori Ito, Master of Arts, Occupational Therapy, 2015-

*William Nakamura, Master of Arts, Occupational Therapy, 2015-
Catherine Tran, Master of Science, Neuroimaging and Informatics, 2015-
Julia Anglin, Master of Science, Computer Science, 2016-*

- 2008-2012, 2015-** **Guest Lecturer, University of Southern California**
Provided guest lectures for both masters-level physical rehabilitation/neuroscience, neuroimaging and undergraduate neuroscience courses.
- 2013** **Scientists Teaching Science Course Certificate of Training, NIH**
Completed an intensive 9-week NIH-sponsored online course on teaching philosophies and methods for educating students in scientific principles.
- 2012** **Instructor, OT 441: Foundations - Neuroscience, University of Southern California**
Taught foundations of neuroscience & clinical implications for undergraduates.
- 2007** **Graduate Student Instructor, University of Southern California**
Led labs for summer courses in neuroscience & kinesiology for masters students.
- 2008-2012** **Graduate Student Mentor, University of Southern California**
Mentored over 15 undergraduates from varying academic disciplines on cognitive neuroscience research including structural MRI and fMRI techniques and data analysis, with over 8 receiving university undergraduate research fellowships.

SERVICE EXPERIENCE

- 2016-** **Editor, Journal of Motor Behavior**
- 2016** **Instructor, Noninvasive Brain Stimulation Methods Course**
- 2015-2016** **Executive Editor, Special Issue: Neural Enhancement for Independent Living, Journal of Motor Behavior**
- 2014, 2015, 2016** **Organizing Chair, Brainhack Los Angeles (November 2016), Brainhack Los Angeles, part of Brainhack Americas (2015), and Brainhack DC, part of Brainhack EDT (2014), a network of sites across North, Central and South America dedicated to open source neuroimaging and neuroscience; organized local talks, Brainhack activities**
- 2011-present** **Ad Hoc Reviewer, Cerebral Cortex, Biological Psychiatry, NeuroImage, Human Brain Mapping, Brain Imaging and Behavior, Journal of Cognitive Neuroscience, Frontiers in Neuroscience, Frontiers in Human Neuroscience, Frontiers in Cellular Neuroscience, Social Cognitive & Affective Neuroscience, Journal of Occupational Science, Journal of Motor Behavior, Archives of Physical Medicine & Rehabilitation, Journal of Neurophysiology, Journal of Neural Engineering, Neuromodulation: Technology at the Neural Interface**
- 2012-2016** **Immediate Past Chair (2015-2016), Chair (2014), Vice Chair (2013), Social Coordinator (2012-2013), Organization of Human Brain Mapping Student & Postdoc Executive Group**
- 2008,2009,2011** **Chairperson of Judging Committee, Los Angeles County Science & Engineering Fair**
- 2007, 2011** **Science Fair Mentor, USC Health Sciences Campus Science Fair**
Mentored a classroom of 5th graders in an underprivileged elementary school on the scientific method, and led them through the steps of creating and presenting a class science fair project.
- 2011** **NeurOnline Champion, Society for Neuroscience NeurOnline Communities**
Responsible for seeding, monitoring, and contributing to the growth of the Society for Neuroscience's online communities.
- 2007-present** **Rice Alumni Regional Coordinator & Young Alumni Ambassador, Association of Rice University Alumni**
Initiate, plan, and execute Rice alumni events, build the alumni community in Los Angeles and DC; build the young alumni network for DC and LA, and represent Rice at college fairs and prospective student interviews.

CLINICAL EXPERIENCE

- 2010-2012** **Occupational Therapist (OTR/L), Supplemental Health Care**
Level I Per Diem Occupational Therapist specializing in adult neurology and physical disabilities, geriatrics, and skilled nursing, with an emphasis on providing care as part of an interdisciplinary team.
- 2012** **Enhancing Motor Control for Occupation course, Rancho Los Amigos, Downey, CA**
Sixteen week clinical course on principles and methods for remediation of motor control problems following upper motor neuron lesions. Included weekly lecture and fieldwork experiences with acute/subacute stroke patients. Covered spasticity management, peripheral nerve stimulation, Neurodevelopmental Treatment (NDT) and Neuro-Integrative Functional Rehabilitation and Habilitation (NEURO-IFRAH).
- 2009** **Level II Fieldwork Intern, Cedars Sinai Medicial Center, Beverly Hills, CA**
Twelve week full-time internship in acute rehabilitation with a focus on patients with spinal/neurological conditions. Development of evaluation skills, treatment planning and execution, and assessment.
- 2007-2008** **Level II Fieldwork Intern, Therapy West and pLay Studio, Inc., Los Angeles, CA**
Twenty-four week part-time internship focused on treatment of pediatrics with disabilities, with an emphasis on skill development in areas of sensory integration, fine motor, gross motor, postural control, sensory motor, personal-social, perceptual, attentional, and self-help components.

PROFESSIONAL AFFILIATIONS & CERTIFICATIONS

Registered Occupational Therapist

National Board for Certification in Occupational Therapy (NBCOT)

Licensed Occupational Therapist

California Board of Occupational Therapy (CBOT)

Certified Strength and Conditioning Specialist

National Strength and Conditioning Association (NSCA)

Healthcare Provider CPR/AED Certified

American Heart Association (AHA)

Immediate Past Chair

Organization for Human Brain Mapping (OHBM), Student and Postdoctoral Executive Section

Member, Society for Neuroscience (SFN)

Member, Organization for Human Brain Mapping (OHBM)

Member, American Occupational Therapy Association (AOTA)

Member, American Society for Neurorehabilitation (ASNR)

Member, The NeuroBureau