

## SAMANTHA R. O'CONNELL

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pronouns: she/her/hers

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### EDUCATION

- 2021 *Ph.D.*, Psychological and Brain Sciences, University of Nevada, Las Vegas, NV  
Advisor: Joel S. Snyder, Ph.D.  
Dissertation: *Exploring the relation between musical and dance sophistication and musical groove perception*
- 2018 *M.A.*, Psychology, University of Nevada, Las Vegas, NV  
Advisor: Joel S. Snyder, Ph.D.  
Thesis: *Why musical groove makes us move: an electroencephalographic investigation*
- 2011 *B.A.*, Psychology, Northwestern University, Evanston, IL
- 2011 *B.Mus.*, Music Performance, Northwestern University, Evanston, IL  
Instrument: Violin

### RESEARCH EXPERIENCE

- 2021- Postdoctoral Scholar – Research Associate, Keck School of Medicine of USC, University of Southern California, Los Angeles, CA  
Bionic Ear Laboratory  
Principal Investigator: Raymond Goldsworthy, Ph.D.
- 2016-21 Graduate Student Researcher, University of Nevada, Las Vegas, NV  
Auditory Cognitive Neuroscience Laboratory  
Principal Investigator: Joel S. Snyder, Ph.D.
- 2013-15 Staff Research Associate II, University of California Los Angeles, CA  
Staglin IMHRO Center for Cognitive Neuroscience  
Principal Investigators: Mark S. Cohen, Ph.D. & Agatha Lenartowicz, Ph.D.
- 2013-15 Senior Research Associate, Think Now, Inc., San Francisco, CA  
Principal Investigator/CSO: Gregory V. Simpson, Ph.D.
- 2010-13 Research Assistant, Northwestern University, Evanston, IL  
Auditory Neuroscience Laboratory  
Principal Investigator: Nina Kraus, Ph.D.
- 2009 Research Assistant, Northwestern University, Evanston, IL  
Institute for Policy Research  
Principal Investigator: Alice Eagly, Ph.D.

### PUBLICATIONS

- O'Connell, S.R.**, Nave-Blodgett, J.E., Wilson, G., Hannon, E.E., & Snyder, J.S. (in preparation).  
Exploring the relation between musical and dance sophistication and musical groove perception.  
*Frontiers in Psychology*.
- Camarena, A., Manchala, G., Papadopolous, J., **O'Connell, S. R.**, & Goldsworthy, R. L. (2022).  
Pleasantness ratings of musical dyads in cochlear implant users. *Brain Sciences*, 12(33), 1-19.

- O'Connell, S.R.** (2021). *Exploring the relation between musical and dance sophistication and musical groove perception* (Order No. 28646824). Available from ProQuest Dissertations & Theses Global; ProQuest One Academic. (2605254181).
- O'Connell, S.R.** (2018). Why musical groove makes us move: an electroencephalographic investigation (Order No. 10974299). Available from Dissertations & Theses at University of Nevada Las Vegas; *ProQuest Dissertations & Theses Global*. (2210151304).
- Lenartowicz, A., Simpson, G.V., **O'Connell, S.R.**, & Cohen, M.S. (2015). Measurement of neurophysiological signals of ignoring and attending processes in attention control. *JoVE (Journal of Visualized Experiments)*, (101), e52958.
- Slater, J., Skoe, E., Strait, D. L., **O'Connell, S.**, Thompson, E. C., & Kraus, N. (2015). Longitudinal evidence of improved speech-in-noise perception with group music training. *Behavioral Brain Research*, 291, 244-252.
- Strait, D. L., Slater, J., **O'Connell, S.**, & Kraus, N. (2015). Music training relates to the development of neural mechanisms of selective auditory attention. *Developmental Cognitive Neuroscience*, 12, 94-104.
- Slater, J., Strait, D. L., Skoe, E., **O'Connell, S.**, Thompson, E. C., & Kraus, N. (2014). Longitudinal effects of group music instruction on literacy skills in low-income children. *Plos One*, 9(11), e113383.
- Strait, D. L., **O'Connell, S.**, Parbery-Clark, A., & Kraus, N. (2014). Musicians' enhanced neural differentiation of speech sounds arises early in life: Developmental evidence from ages three to thirty. *Cerebral Cortex*, 24(9), 2512-2521.
- Strait, D. L., Parbery-Clark, A., **O'Connell, S.**, & Kraus, N. (2013). Biological impact of preschool music classes on processing speech in noise. *Developmental Cognitive Neuroscience*, 6, 51-60.
- Tierney, A., Strait, D. L., **O'Connell, S.**, & Kraus, N. (2013). Developmental changes in resting gamma power from age three to adulthood. *Clinical Neurophysiology*, 124(5), 1040-1042.

## AWARDS

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| 2019-21 | UNLV Foundation Board of Trustees Fellowship, University of Nevada, Las Vegas, NV |
| 2017-21 | Summer Doctoral Fellowship, University of Nevada, Las Vegas, NV                   |
| 2017-19 | Patricia Sastaunik Scholarship, University of Nevada, Las Vegas, NV               |
| 2017    | Lovinger Award, Department of Psychology, University of Nevada, Las Vegas, NV     |
| 2015-16 | Graduate Recruitment Scholarship, University of Nevada, Las Vegas, NV             |

## CONFERENCE PRESENTATIONS

### Podium Presentations

- O'Connell, S.R.\***, Nave-Blodgett, J.E., Wilson, G., Ridgway, W.B., Insouvanh, K., Hannon, E.E., & Snyder, J.S. (2021, November). *Exploring the Relation Between Musical and Dance Sophistication and Musical Groove Perception*. The 19<sup>th</sup> Annual Auditory Perception Cognition and Action Meeting.

### Posters

- Sundaram, S., Gan, H., **O'Connell, S.R.**, Goldsworthy, R.L. (2022, January). *Effects of Music-Induced Arousal on Performance in the Iowa Gambling*. Keck School of Medicine of USC.

- Lenartowicz, A., Simpson, G.V., **O'Connell, S.R.\***, Noah, S.L.M., Head, A.L., Bilder, R.M., McCracken, J.T., Bookheimer, S.Y., Reid, R., Cohen, M.S. (2015). *New EEG measures reveal infra-slow fluctuations in both attending and ignoring in adults with ADHD that provide high accuracy in discriminating ADHD from control*. Society for Neuroscience. McCormick Place, Chicago, IL.
- Strait, D.L., **O'Connell, S.**, Kraus, N. (2012). *Neural discrimination of stop consonants in musician and nonmusician children*. MidWinter Meeting of the Association for Research in Otolaryngology. San Diego, CA.
- O'Connell, S.\***, Strait, D.L., Parbery-Clark, A., Kraus, N. (2011). *Musical training promotes development of attention abilities: evidence in children and adults*. Music, Science and Medicine: Frontiers in Biomedical Research and Clinical Applications, New York Academy of Sciences, New York, NY.
- O'Connell, S.\***, Strait, D.L., Parbery-Clark, A., Kraus, N. (2011). *Musical training promotes development of attention abilities: evidence in children and adults*. Chicago Area Undergraduate Research Symposium. Museum of Science and Industry, Chicago, IL.

\*presenting author

### INVITED TALKS

- O'Connell, S.R.** *Exploring the Relation Between Musical and Dance Sophistication and Musical Groove Perception*. (2021, June). Dissertation Defense, Department of Psychology, University of Nevada, Las Vegas, NV
- O'Connell, S.R.** (2021, March). *Musical Groove Perception: Studies on Motor System Engagement and Arts Sophistication*. Bionic Ear Lab, University of Southern California, Los Angeles, CA.
- O'Connell, S.R.** (2020, December). *Why Does It Feel So Good to Dance? Movement, Music, and the Brain*. Chicago Tap Theatre, Chicago, IL.
- O'Connell, S.R.** (2018, July). *Why Musical Groove Makes Us Move: An Electroencephalographic Investigation*. Master's Thesis Defense, Department of Psychology, University of Nevada, Las Vegas, NV.
- O'Connell, S.R.** (2018, April). *Why Musical Groove Makes Us Move: An Electroencephalographic Investigation*. Departmental Data Blitz, Department of Psychology, University of Nevada, Las Vegas, NV.
- O'Connell, S.R.** (2016, November). *Why Music Makes Us Dance: An EEG Investigation*. Department of Psychology, University of Nevada, Las Vegas, NV
- O'Connell, S.R.** (2016, April). *Investigating the Influence of Groove on Motor Excitation and Arousal*. Department of Psychology, University of Nevada, Las Vegas, NV.

### TEACHING EXPERIENCE

- 2018-19 Course Instructor, Department of Psychology, University of Nevada, Las Vegas, NV  
Course: General Psychology (Undergraduate), 2 sections per semester, approx. 25 students per section, in-person instruction
- 2016-17 Teaching Assistant, Department of Psychology, University of Nevada, Las Vegas, NV  
Course: Introduction to Cognitive Neuroscience (Undergraduate), 1 section per semester, approx. 25 students per section
- 2016 Teaching Assistant, Department of Psychology, University of Nevada, Las Vegas, NV  
Course: Sensation and Perception (Undergraduate), 1 section, approx. 25 students

### ADDITIONAL TRAINING

- 2017 Certification in Responsible Conduct of Research, Department of Psychology, University of Nevada, Las Vegas, NV
- 2016 Certification in Non-Invasive Brain Stimulation Method, Department of Biokinesiology and Physical Therapy, University of Southern California, Los Angeles, CA
- 2016 ERP Boot Camp, Center for Mind and Brain, University of California, Davis, CA

### ASSOCIATIONS

- 2021- Member, *Association for Research in Otolaryngology (ARO)*
- 2018-19 Member, *American Psychological Association: Society for Teaching of Psychology*
- 2017-19 Member, *Association for Psychological Science*
- 2016- Member, *Society for Music Cognition and Perception (SMPC)*

### SERVICE TO THE PROFESSION

- 2021 - Invited Manuscript Reviewer: *The Laryngoscope*
- 2021- Diversity and Minority Committee Representative, Student, Postdoc, Resident and Fellow chapter of the Association for Research in Otolaryngology (spARO) Steering Committee
- 2019 Instructor, Rebel STEM Academy, University of Nevada, Las Vegas, NV
- 2018 Instructor, Dawson Bound Project, Las Vegas, NV
- 2017 Judge, Beal Bank USA Southern Nevada Regional High School Science & Engineering Fair, Las Vegas, Nevada
- 2017 Secretary, 500 Women Scientists, Las Vegas, NV
- 2016-21 Mentor, Outreach Undergraduate Mentoring Program, University of Nevada, Las Vegas, NV
- 2016 Secretary, Experimental Student Committee, Department of Psychology, University of Nevada, Las Vegas, NV

### TECHNICAL SKILLS

Programming Languages: Matlab

Human Neuroimaging:

- EEG (cortical and auditory brainstem responses)  
Hardware: Biosemi, Neuroscan, Electrical Geodesic, Inc., DuoMag  
Software: BESA, Net Station, BrainVision Analyzer, ActiView, EEGlab, ERPlab
- TMS: DuoMAG, Magstim
- fNIRS: NIRx NIRScout

Stimulus Creation and Presentation: Presentation, E-Prime, Audacity

Statistical Analysis: SPSS, JASP