

Curriculum Vitae

Department of Cognitive Sciences
University of California, Irvine
184 Social Science Laboratory
Irvine, CA 92697-5100

Luke Baltzell
lucassbaltzell@gmail.com
Hearing Lab

EDUCATION

- | | | |
|-----------|--|--------------|
| 2013-2018 | University of California, Irvine
<i>Ph.D Psychology Expected</i> | Irvine, CA |
| 2013-2016 | University of California, Irvine
<i>M.S. Cognitive Science</i> | Irvine, CA |
| 2006-2010 | Reed College
<i>B.A. Psychology</i>
Senior Thesis: "Interaction between syntax processing in language and music as a function of bilingualism: An ERP study" | Portland, OR |

TRAINING/SKILLS

- Digital signal processing / time-series analysis
- Acquisition and analysis of EEG data
- Psychoacoustics
- Statistics
- Programming in MATLAB
- Experience with Python
- Experience with TensorFlow

AWARDS

- | | | |
|-----------|---|--------------|
| 2016 | Outstanding Graduate Student
Center for Hearing Research, University of California, Irvine | Irvine, CA |
| 2009-2010 | Commendation for Excellence in Scholarship
Administration Committee of Reed College | Portland, OR |
| 2008-2009 | Commendation for Excellence in Scholarship
Administration Committee of Reed College | Portland, OR |
| 2007-2008 | Commendation for Excellence in Scholarship | |

GRANTS & FELLOWSHIPS

- 2014-2016 Interdisciplinary Training Program in Hearing Research, Center for Hearing Research (NIH T32 DC010775)
University of California, Irvine Irvine, CA
- 2010 Initiative Grant for Undergraduate Research
Office of the President Portland, OR

PUBLICATIONS: *Peer-Reviewed*

- Baltzell, LS.**, Srinivasan, R., Richards, VR. (*in press*) “The effect of prior knowledge and intelligibility on the cortical entrainment response to speech” *Journal of Neurophysiology*
- Baltzell, LS.**, Horton, C., Yi, S., Richards, VR., D’Zmura, M., and Srinivasan, R. (2016) “Attention selectively modulates cortical entrainment in different region of the speech spectrum,” *Brain Research*, 1644: 203-212.
- Billings, CJ., Penman, TM., Ellis, EM., **Baltzell, LS.**, and McMillan, GP. (2016) “Phoneme and Word Scoring in Speech-in-Noise Audiometry,” *American Journal of Audiology*, 25: 75-83.
- Papesh, MA., Billings, CJ., and **Baltzell LS.** (2014) “Background noise can enhance cortical auditory evoked potentials under certain conditions,” *Clinical Neurophysiology*, doi:10.1016/j.clinph.2014.10.017
- Baltzell, LS.** and Billings, CJ. (2013) “Sensitivity of offset and onset cortical auditory evoked potentials to signals in noise,” *Clinical Neurophysiology*, 125(2): 370-380.
- Billings, CJ., Papesh, MA., Penman, TM., **Baltzell, LS.**, and Gallun, FJ. (2012) “Clinical Use of Aided Cortical Auditory Evoked Potentials as a Measure of Physiological Detection or Physiological Discrimination,” *International Journal of Otolaryngology*, doi:10.1155/2012/365752

PUBLICATIONS: *Other*

- Baltzell, Lucas S.** *Interaction Between Syntax Processing in Language and Music as a*

Function of Bilingualism: An ERP Study. Diss. Reed College, 2010. OCLC #: 624366709.

CONFERENCE POSTERS

Baltzell, LS., Richards, VM., Srinivasan, R. (2017) “The cortical entrainment response to speech shows no effect of stimulus intensity,” 40th ARO Mid-Winter Meeting; February 11-15.

Baltzell, LS., Richards, VM., Srinivasan, R. (2016) “Exploring the effects of intelligibility on cortical entrainment,” Neuroscience 2016; November 12-16.

Baltzell, LS., Srinivasan, R., Richards, VM. (2016) “Effects of task demand and intelligibility on the cortical entrainment response,” 8th Annual Society for the Neurobiology of Language Conference; August 17-20.

Baltzell, LS., Horton, C., Shen, Y., Richards, VM., and Srinivasan, R. (2015) “Attentional filtering through cortical entrainment shows sensitivity to frequency,” 38th ARO Mid-Winter Meeting; February 16-20.

Baltzell, LS. and Billings, CJ. (2013) “Neural Encoding of Speech in Noise: Comparing Auditory Evoked Offset and Onset Responses,” 36th ARO Mid-Winter Meeting; February 16-20.

Baltzell, LS., Dillman, G., Gallun, FJ., Molis, MR., Konrad-Martin, D., Billings, CJ. (2012) “Auditory Brainstem Encoding of Envelope and Fine Structure: Recording the Frequency Following Response,” Northwest Auditory & Vestibular Meeting; October 25-26.

Papesh, MA., **Baltzell, LS.**, Billings, CJ. (2012) “Can Background Noise Enhance Cortical Encoding?,” Northwest Auditory & Vestibular Meeting; October 25-26.

INVITED TALKS

“Attentional filtering through cortical entrainment shows sensitivity to frequency” (May, 2016). *Eleventh Annual Center for Hearing Research Symposium*, University of California, Irvine

PROFESSIONAL SERVICE

- Ad Hoc Reviewer, *JASA*

- Ad Hoc Reviewer, *Hearing Research*
- Ad Hoc Reviewer, *Ear and Hearing*

PROFESSIONAL AFFILIATIONS

- Member, *Society for Neuroscience*
- Member, *Society for the Neurobiology of Language*
- Member, *Association for Research in Otolaryngology*

WORK EXPERIENCE

2017	Starkey Hearing Technologies Research Intern	Berkeley, CA
2013 – 2014	University of California Irvine Teaching Assistant	Irvine, CA
2011 – 2013	National Center for Rehabilitative Auditory Research Research Assistant for Dr. Curtis Billings	Portland, OR
2011	Department of Linguistics, UCLA Research Assistant for Dr. Carson Schutze	Los Angeles, CA
2010 – 2011	SUN After-School Program, Grout Elementary Instructor through Schools Uniting Neighborhoods (SUN)	Portland, OR
2009	Department of Psychology, Reed College Research Assistant for Dr. Enriqueta Canseco-Gonzalez	Portland, OR
2009	Department of Psychology, Reed College Teaching Assistant	Portland, OR

REFERENCES

Dr. Virginia Richards – Professor of Cognitive Science, University of California, Irvine
949.824.2051
v.m.richards@uci.edu

Dr. Ramesh Srinivasan – Professor of Cognitive Science, University of California, Irvine
949.824.2696
r.srinivasan@uci.edu

Dr. Sridhar Kalluri – Director of Starkey Hearing Research Center, Starkey Hearing Technologies
Sridhar_Kalluri@starkey.com

Dr. Fan-Gang Zeng – Professor of Otolaryngology, University of California, Irvine
949.824.1539
fzeng@uci.edu

Dr. Curtis J. Billings – Research Investigator, National Center for Rehabilitative Auditory Research (NCRAR)
503.220-8262 x54574
Curtis.Billings2@va.gov