

JULIA FELD STRAND

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Updated 3/26/21

ACADEMIC POSITIONS

Associate Professor (2020-present)

Carleton College (Northfield, MN)
Department of Psychology

Assistant Professor (2013-2020)

Carleton College (Northfield, MN)
Department of Psychology

Visiting Assistant Professor (2011-2013)

Carleton College (Northfield, MN)
Department of Psychology

Postdoctoral Research Associate (2010-2011)

Washington University (St. Louis, MO)
Department of Biomedical Engineering
Laboratory of Sensory Neuroscience and Neuroengineering

EDUCATION

Ph.D. in Psychology (2010)

Washington University (St. Louis, MO)
Division of Brain, Behavior, and Cognition

M.A. in Psychology (2008)

Washington University (St. Louis, MO)

B.A. in Psychology and English, with honors (2004)

Tufts University (Medford, MA)

COURSES TAUGHT

- Principles of Psychology (Psyc110)
- Sensation and Perception (Psyc220) with laboratory (Psyc221)
- Special Topics in Psychological Research (Psyc300)
- The Psychology of Spoken Words (Psyc362)
- Perceptual & Cognitive Expertise (Psyc372)
- Capstone Seminar: Psychology's Credibility Revolution (Psyc399)
- Color! (IDSC250)
- Summer Quantitative Reasoning Institute: Psychology (Carleton Summer Programs)

PEER-REVIEWED PUBLICATIONS (* indicates undergraduate and alumni collaborators)

- *Brown, V., *Dillman-Hasso, N., *Li, Z., *Ray, L., *Mamantov, E., Van Engen, K., **Strand, J.** (*under review*). Lipreading in noise: Cross-modal analysis of the Target-Masker Linguistic Similarity Hypothesis.
- *Brown, V., Fox, N., **Strand, J.** (*in press*) Where are the...fixations?": Listeners use grammatical number cues to anticipate upcoming referents and reduce lexical search space. *Journal of Experimental Psychology: Learning, Memory, and Cognition*.
- **Strand, J.**, *Ray, L., *Dillman-Hasso, N., *Villanueva, J., *Brown, V., (2021). Understanding speech amid the jingle and jangle: Recommendations for improving measurement practices in listening effort research. *Auditory Perception & Cognition*. <https://doi.org/10.1080/25742442.2021.1903293>
- *Guang, C., *Lefkowitz, E., *Dillman-Hasso, N., *Brown, V., **Strand, J.** (2021). Recall of speech is impaired by subsequent masking noise: A replication of Rabbitt (1968) Experiment 2. *Auditory Perception & Cognition*. <https://doi.org/10.1080/25742442.2021.1896908>
- Rohrer, J., Tierney, W., Uhlmann, E. L., DeBruine, L. M., Heyman, T., Jones, B., ... **Strand, J.**, ... & Lucas, R. E. (2021). Putting the self in self-correction: Findings from the Loss-of-Confidence Project. *Perspectives on Psychological Science*. <https://doi.org/10.1177/1745691620964106>
- *Brown, V., McLaughlin, D., **Strand, J.**, & Van Engen, K. (2020). Rapid adaptation to fully intelligible nonnative-accented speech reduces listening effort. *Quarterly Journal of Experimental Psychology*.
- **Strand, J.**, *Brown, V., Barbour, D. (2020). Talking points: A modulating circle increases listening effort without improving speech recognition in younger adults. *Psychonomic Bulletin & Review*, doi: 10.3758/s13423-020-01713-y.
- *Brown, V., & **Strand, J.** (2019). About face: Seeing the talker improves spoken word recognition but increases listening effort. *Journal of Cognition*.
- *Brown, V., & **Strand, J.** (2019). "Paying" attention to audiovisual stimuli: Do incongruent stimuli incur greater costs? *Attention, Perception, & Psychophysics*, 6, 1743-1756. doi:10.3758/s13414-019-01772-x. Registered Report.
- Liben-Nowell, D., **Strand, J.**, Sharp, A, Woods., K., Wexler, T. (2019). The danger of testing effects through selecting controlled subsets, with applications to spoken-word recognition. *Journal of Cognition*, 2, doi: 10.5334/joc.51
- *Brown, V., & **Strand, J.** (2018). Noise increases listening effort in normal-hearing young adults, regardless of working memory capacity. *Language, Cognition & Neuroscience*, 34, 628-640. doi:10.1080/23273798.2018.1562084
- *Brown, V., *Hedayati, M., *Zanger, A., *Mayn, S., *Ray, L., *Dillman-Hasso, N., **Strand, J.** (2018). What accounts for individual differences in susceptibility to the McGurk effect? *PLoS ONE*, 13, doi:10.1371/journal.pone.0207160
- **Strand, J.**, *Brown, V., *Merchant, M., *Brown, H., *Smith, J. (2018). Measuring listening effort: Convergent validity, sensitivity, and links with cognitive and personality measures. *Journal of Speech, Language & Hearing Research*, 61, 1463–1486, doi:10.1044/2018_JSLHR-H-17-0257
- **Strand, J.**, *Brown, V., *Brown, H., & *Berg, J. (2017). Keep listening: Grammatical context reduces but does not eliminate activation of unexpected words. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 44, 962-973. doi: /10.1037/xlm0000488
- **Strand, J.**, & Liben-Nowell, D. (2016). Making long-distance relationships work: Quantifying lexical competition with Hidden Markov Models. *Journal of Memory and Language*, 90, 88-102. doi: 10.1016/j.jml.2016.03.007
- Gahl, S., & **Strand, J.** (2016). Many neighborhoods: Phonological neighborhood density in retrieval, planning, articulation, and perception. *Journal of Memory and Language*, 89, 162-178. doi:j.jml.2015.12.006 0749-596X

- *Slote, J., & **Strand, J.** (2016). Conducting spoken word recognition research online: Validation and a new timing method. *Behavior Research Methods* 48(2), 553-66. doi: 10.3758/s13428-015-0599-7
- **Strand, J.**, *Cooperman, A., *Rowe, J., & *Simenstad A. (2014). Individual differences in susceptibility to the McGurk effect: Links with lipreading and detecting audiovisual incongruity. *Journal of Speech, Language & Hearing Research*, 57, 2322-2331. doi:10.1044/2014_jslhr-h-14-0059.
- **Strand, J.**, *Simenstad, A., *Cooperman, A., & *Rowe, J. (2014). Grammatical context constrains lexical competition in spoken word recognition. *Memory & Cognition*, 42, 676-687. doi: 10.3758/s13421-013-0378-6
- **Strand, J.**, (2014). Phi-square Lexical Competition Database (Phi-Lex): An online tool for quantifying auditory and visual lexical competition. *Behavior Research Methods*, 46(1), 148-158. doi:10.3758/s13428-013-0356-8
- **Strand, J.**, & Sommers, M. (2011). Sizing up the competition: Quantifying the influence of the mental lexicon on spoken word identification. *Journal of the Acoustical Society of America*, 130(3), 1663-1672. doi:10.1121/1.3613930
- **Feld, J.**, & Sommers, M. (2011). There goes the neighborhood: Lipreading and the mental lexicon. *Speech Communication*, 53, 220-228. doi:10.1016/j.specom.2010.09.003
- **Feld, J.**, & Sommers, M. (2009). Lipreading, processing speed, and working memory in younger and older adults. *Journal of Speech Language and Hearing*, 52(6), 1555-1565. doi: 10.1044/1092-4388(2009/08-0137).
 - o Named 'All-around favorite article' in the Hearing Journal's Best of 2009: Audiologic Rehabilitation

PEER-REVIEWED CONFERENCE PROCEEDINGS

- *Brown, V., *Chen, X., *Hedayati, M., *Sikes, C., **Strand, J.**, *Wilson, T., & Liben-Nowell, D. (2019). Node ordering for rescalable network summarization (or, the apparent magic of word frequency and age of acquisition in the lexicon). In *Complex Networks and Their Applications VII* (pp. 66–80). Springer International Publishing.

PEER-REVIEWED PEDAGOGICAL PUBLICATIONS

- **Strand, J.**, & *Brown, V. (2019). Publishing open, reproducible research with undergraduates. *Frontiers in Educational Psychology*, 10. doi: 10.3389/fpsyg.2019.00564

NON PEER-REVIEWED PROFESSIONAL WRITING

- **Strand, J.** (2020) "When Science Needs Self Correcting." Medium <https://tinyurl.com/ya4mlpcv>
 - o This essay received a Commendation from the *Society for the Improvement of Psychological Science*
- **Strand, J.**, (2021). "Error Tight: Exercises for Lab Groups to Prevent Research Mistakes" errortight.com

EXTERNAL GRANT SUPPORT

- NIH AREA grant 1R15DC018114-01, 9/1/2019-8/31/2022, "Evaluating the listening effort associated with audiovisual speech," \$404,634.00
- *Association for the Advancement of Liberal Arts Colleges* support for a workshop on "Teaching and Employing Open Science Practices at Small Liberal Arts Colleges," to be conducted 08/2021, \$17,000

INVITED TALKS

- *Toward A More Robust Science: Transparency, Replicability, and Self-Correction* (March, 2021). Washington University in St. Louis, Advanced Cognitive, Computational and Systems Neuroscience Pathway Lecture Series.
- *Listening effort and audiovisual speech* (April, 2020). Baylor College of Medicine Core for Advanced Magnetic Resonance Imaging Seminar Series. Online.
- *The many faces of listening effort* (March, 2020). Union College Department of Psychology lecture. Schenectady, NY.
- *Integrating contextual and perceptual information during spoken word recognition* (March, 2017). Washington University in St. Louis Department of Psychology lecture.
- *Why you're a better listener than your smartphone: Context and visual cues in spoken word recognition* (March, 2016). Carleton Clubs Twin Cities Downtown Luncheon. Minneapolis, MN.
- *Careers at liberal arts colleges: Maintaining a successful research program.* (November, 2014). Annual meeting of the Psychonomic Society. Long Beach, CA.
- *It's very hard to wreck a nice beach: Using Hidden Markov Models to model spoken word recognition* (July, 2014). Carleton College Summer Science Tea Talks (with David Liben-Nowell).
- *Grammatical context and models of spoken word recognition.* (September, 2013). University of Minnesota Center for Cognitive Sciences Textgroup, Minneapolis, MN.
- *Words in the Mind: Perceiving Spoken Language.* (July, 2013). Carleton Summer Science Tea Talks.
- *Expert perception: Face & speech recognition.* (June, 2013). Advanced Placement Psychology Summer Institute.
- *Recognizing words by sight and sound: Lexical competition and the mental lexicon.* (March 2013). University of California, Berkeley Linguistics Department Colloquium.
- *See what I'm saying? Speech perception by ear and eye.* (July, 2012). Carleton College Summer Quantitative Reasoning Institute research talk series.
- *The expert in each of us.* (June, 2012). Advanced Placement Psychology Summer Institute.
- *Spoken word recognition: Individual differences and cognitive effects.* (October, 2011). Carleton College Linguistics Department Colloquium Series.

TALKS AT NATIONAL CONFERENCES

- Brown, V., Fox, N., **Strand J.** (November, 2020). "*Where are the . . . fixations?": Grammatical number cues guide anticipatory fixations to upcoming referents and reduce lexical competition.* Presented at the Annual Meeting of the Psychonomic Society.
- **Strand, J.** (November, 2019). *The jingle and jangle of listening effort.* Presented at the Auditory Perception, Cognition and Action Meeting. Montreal, Canada
- **Strand, J.,** & *Slote, J. (November, 2014). *Validating the use of an online platform to collect spoken word recognition data.* Presented at the Auditory Perception, Cognition and Action Meeting. Long Beach, CA.
- Gahl, S., & **Strand, J.** (January, 2013). *Explaining phonetic variation: Similarity vs. confusability as predictors of vowel dispersion.* Presented at the Linguistics Society of America Annual Meeting, Boston, Massachusetts.
- **Feld, J.,** & Sommers, M. (November, 2010). *There goes the neighborhood: Lipreading and the structure of the mental lexicon.* Presented at the Auditory Perception, Cognition and Action Meeting. St. Louis, Missouri.

POSTERS AT NATIONAL CONFERENCES

- *Brown, V., *Dillman-Hasso, N., *Li, Z., *Ray L., *Mamantov, E., Van Engen, K., & **Strand, J.** (November, 2020). Lipreading in noise: Cross-modal analysis of the Target-Masker Linguistic Similarity Hypothesis. Annual Meeting of the Psychonomic Society.
- *Guang, C., *Lefkowitz, E., *Dillman-Hasso, N., *Brown, V., **Strand, J.** (November, 2020). Recall of speech is impaired by subsequent masking noise: A direct replication of Rabbitt (1968). Auditory Perception, Cognition and Action Meeting
- *Ray, L., *Dillman-Hasso, N., *Brown, V., *Hedayati, M., *Zanger, A., *Mayn, S., **Strand, J.** (November, 2019). What accounts for individual differences in susceptibility to the McGurk effect? Auditory Perception, Cognition and Action Meeting, Montreal, Canada.
- *Brown, V., & **Strand, J.** (November, 2019). About face: Seeing the talker improves spoken word recognition but increases listening effort. Annual Meeting of the Psychonomic Society, Montreal, Canada.
- **Strand, J.**, *Brown, V., Barbour, D. (November, 2018). Talking points: A modulating circle reduces listening effort without improving speech recognition. Annual Meeting of the Psychonomic Society, New Orleans, LA.
- *Brown, V., **Strand, J.** (November, 2018). Noise increases listening effort in normal-hearing young adults, regardless of working memory capacity. Auditory Perception, Cognition and Action Meeting, New Orleans, LA.
- Liben-Nowell, D., **Strand, J.** (May, 2018). The danger of testing effects through selecting controlled subsets, with applications to spoken-word recognition. Association for Psychological Science Annual Meeting. San Francisco, CA.
- **Strand, J.**, *Brown, V., *Merchant, M., *Brown, H., *Smith, J. (November, 2017). Measuring listening effort: Convergent validity, sensitivity, and links with cognitive and personality measures. Auditory Perception, Cognition and Action Meeting. Vancouver, Canada.
- **Strand, J.**, *Brown, V., *Brown, H. (November, 2016). Keep listening: Grammatical context reduces but does not eliminate activation of unexpected words. Annual Meeting of the Psychonomic Society, Boston, MA.
- *Papaioannou, O., **Strand, J.**, Grauly, C., Oretogo, K., Canseco-Gonzalez, E. (March, 2015). Multistage audiovisual speech processing modulating the mismatch negativity. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
- **Strand, J.**, *Simenstad, A., *Berg, J., *Slote, J (November, 2014). Grammatical context restricts which lexical candidates are activated during spoken word recognition. Annual Meeting of the Psychonomic Society, Long Beach, CA.
- **Strand, J.**, *Cooperman, A., *Rowe, J., *Simenstad, A. (May, 2014). Individual variability in audiovisual integration: Insights from the McGurk effect. Association for Psychological Science Annual Meeting. San Francisco, CA.
- **Strand, J.**, *Simenstad, A., *Cooperman, A., *Rowe, J. (May, 2013). Grammatical context constrains lexical activation during spoken word recognition. Association for Psychological Science Annual Meeting. Washington, DC
- Gahl, S., & **Strand, J.** (March, 2013). Auditory confusability vs. phonological neighborhood in language production. CUNY Conference, Columbia, SC.
- **Strand, J.** (November, 2012). Neighborhood density and grammatical class: Within-class competitors benefit spoken word recognition. Auditory Perception, Cognition and Action Meeting. Minneapolis, MN.
- **Strand, J.**, & Sommers, M. (May, 2012). Nouns in the neighborhood: Grammatical class influences lexical competition. Association for Psychological Science. Chicago, IL.
- **Feld, J.**, Barbour, D., & Sommers, M. (February, 2011). Sizing up the competition: Quantifying the influence of the mental lexicon on spoken word recognition. Association of Research in Otolaryngology. Baltimore, MD.

- **Feld, J., & Sommers, M.** (April, 2008). Visual speech perception and aging. Cognitive Aging Conference. Atlanta, GA.
- **Feld, J., & Sommers, M.** (November, 2007). Lipreading, processing speed, and working memory in younger & older adults. Annual Meeting of the Psychonomic Society. Long Beach, CA.
- Harris, C., & **Feld, J.** (July, 2004). Language is embodied, emotional, and contextualized: Evidence from psychophysiological studies of bilingual speakers. *Language, Culture, and Mind*, University of Portsmouth. Portsmouth, U.K.

STUDENT POSTERS SUPERVISED

- Minnesota Undergraduate Psychology Conference: 2013–2019
- Carleton Student Research Symposium & Celebration: 2013–2019
- Minnesota Undergraduate Linguistics Symposium: 2013

INTERNAL GRANT SUPPORT

- *Carleton Curriculum Development Grant* (with collaborators Jason Decker & Marty Baylor) to create an interdisciplinary course on vision and color perception, drawing from physics, philosophy, and psychology. 2018
- *Carleton Curriculum Development Grant to Support Integrative Learning* (with collaborator Jennifer Wolff) to create a collaborative learning experience for Sensation & Perception and Genetics. 2014
- *Carleton College Writing Across the Curriculum Grant* to revise Psyc220 (Sensation & Perception). 2013
- *Carleton College Curriculum Development Grant* to develop a new course: Perceptual and Cognitive Expertise. 2013
- *Howard Hughes Medical Institute* to Carleton College Interdisciplinary Science and Math Initiative (*Grant 52006286*) - Support for student research & supplies. 2012-2014
- *Carleton Quantitative Inquiry, Reasoning, and Knowledge Initiative* course revision grant. 2012

COLLEGE SERVICE

- Carleton College Educational and Curricular Committee member, 2020-
- Carleton IRB committee, 2019-2020
- College Council, 2017-2019
- Summer Science Tea Talks coordinator, 2016 & 2018
- Chair, working group on the challenges facing low-income and first-generation students, 2016
- Committee on Student Life Member, 2014-2016
- Psychology Department Comps Coordinator, 2014-2016, 2017-2018
- Quantitative Inquiry, Reasoning, and Knowledge Initiative Steering Committee, 2013-2015
- Minnesota Undergraduate Linguistics Symposium panelist, *Being a Linguist*, 2013
- Learning and Teaching Center Book Club facilitator, 2012
- Psychology Department & Curricular Committee presenter, *Getting into Grad School*, 2011-2013
- Writing Center portfolio reader, 2012-2014
- Psychology Department, Journal Club advisor, 2011-2014

PROFESSIONAL ACTIVITIES AND MEMBERSHIPS

Associate Editor:

- *Advances in Methods and Practices in Psychological Science*, 2020-present

Leadership in Professional Societies:

- Auditory Perception, Action, Cognition Meeting organizing committee member, 2018-2020
- Society for the Improvement of Psychological Science program committee member, 2019-2022
- Society for the Improvement of Psychological Science, program committee chair, 2021

Memberships: Acoustical Society of America; Auditory Perception, Cognition, Action Research Foundation; Association for Psychological Science; Cognitive Science Society; Psychonomic Society; Society for the Improvement of Psychological Science; Society for the Teaching of Psychology; Women in Cognitive Science

Ad hoc Reviewer: American Journal of Psychology; Applied Psycholinguistics; Attention, Perception, & Psychophysics; Behavior Research Methods; Cognitive Science Society; Experimental Brain Research; International Journal of Audiology; Journal of the Acoustical Society of America; Journal of Experimental Psychology: General; Journal of Speech, Language, and Hearing Research; Language and Speech; PLoS ONE; Psychological Science, WIREs Cognitive Science

SCIENCE COMMUNICATION

- Invited talk at the Science of Learning and the Art of Communication at the University of Connecticut, January 2020.
- Podcast co-host, *The Juice and the Squeeze*, <http://www.juiceandsqueeze.net/>