Curriculum Vitae

XIN XIE

DEPARTMENT OF BRAIN AND COGNITIVE SCIENCES UNIVERSITY OF ROCHESTER 323 MELIORA HALL, ROCHESTER, NY 14627-0268 XXIE13@UR.ROCHESTER.EDU

RESEARCH INTERESTS

Speech perception and production, neural correlates of spoken language processing, perceptual learning, native and non-native speech communication, language plasticity, computational modeling, language acquisition, bilingualism, talker identification

EDUCATION

Summer 2017 Kavli Summer Institute in Cognitive Neuroscience, UC Santa Barbara, Santa Barbara, CA.

2009-2015 Ph.D. in Experimental Psychology, University of Connecticut

Advisors: Emily Myers and Carol Fowler

Dissertation: "Phonetic adaptation to foreign-accented speech"

Committee: Emily Myers (chair), Carol Fowler, Jim Magnuson, Rachel Theodore

2005-2009 B.S.E. in Systems Science and Engineering, Zhejiang University, China

RESEARCH POSITIONS

2016-present Postdoctoral Associate. University of Rochester, Department of Brain and Cognitive Sciences. PI: Florian Jaeger.

2015-2016 Postdoctoral Researcher. University of Connecticut, Department of Speech, Language and Hearing Sciences. PI: Emily Myers.

PEER-REVIEWED PUBLICATIONS

- **Xie, X.** & Myers, E. B. (under review). LIFG sensitivity to phonetic competition in receptive language processing: a comparison of clear and conversational speech.
- **Xie, X.**, Earle, F. S. & Myers, E. B. (under review). Sleep facilitates generalization of accent adaptation to a new talker.

- Xie, X., & Myers, E. B. (2017). <u>Learning a talker or learning an accent: Acoustic similarity constrains generalization of foreign accent adaptation to new talkers.</u> *Journal of Memory and Language*, 97, 30-46.
- **Xie, X.**, Theodore, R.M., & Myers, E. B. (2017). More than a boundary shift: perceptual adaptation to foreign-accented speech reshapes internal structure of phonetic categories. *Journal of Experimental Psychology: Human Perception and Performance, 43, 206-217.*
- **Xie, X.** & Myers, E. B. (2015). The impact of musical training and tone language experience on talker identification. *Journal of the Acoustical Society of America, 137*, 419-432.
- Xie, X., & Myers, E. B. (2015). General language ability predicts talker identification. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceedings of the 37th Annual Meeting of the Cognitive Science Society*, (pp. 2697-2702). Austin, TX: Cognitive Science Society.
- **Xie, X.** & Fowler, C. A. (2013). <u>Listening with a foreign-accent: The interlanguage speech intelligibility benefit in Mandarin speakers of English. *Journal of Phonetics*, 41, 369-378.</u>

BOOK CHAPTERS

- Fowler, C. A., & Xie, X. (2016). Involvement of the speech motor system in speech perception. In P. van Lieshout, B. Maassen, and H. Terband (Eds.). *Speech motor control in normal and disordered speech: Future developments in theory and methodology* (pp. 1-24). Rockville, MD: ASHA Press.
- Myers, E., Johns, A.R., Earle, F.S., and **Xie, X.** (2017). Myers, E., Johns, A.R., Earle, F.S., and Xie, X. (in press). The Invariance Problem in the Acquisition of Non-Native Phonetic Contrasts: From Instances to Categories. In Lahiri, A. and S. Kotzor (Eds.). *The Speech Processing Lexicon: Neurocognitive and Behavioural Approaches* (pp. 52-84). Berlin: De Gruyter/Mouton.

MANUSCRIPTS IN PREPARATION

- **Xie, X.,** Weatherholtz, K., Bainton, L., Rowe, E., Burchill, Z., Liu, L., & Jaeger, T. F. (in preparation). Revisiting rapid adaptation to foreign-accented speech and its limits.
- **Xie, X., &** Myers, E. B. (in preparation). Consistency matters: Effects of within-talker acoustic variability on rapid learning of foreign accents.
- **Xie, X., &** Myers, E. B. (in preparation). Contextual information aids perceptual adaptation to speakers of low intelligibility.
- **Xie, X.,** Myers, E. B., Magnuson, J. S., Mencl, W. E., Irwin, J. R., Brancazio, L., & Rueckl, J. (in preparation). Encoding articulator information in the brain during speech perception.

CONFERENCE PRESENTATIONS

Xie, X., Myers, E. B. (Novemer, 2017). Inferior frontal gyrus activation is modulated by phonetic competition: An fMRI study of clear and conversational speech. Poster to be

- presented at *The Ninth Annual Meeting of the Society for the Neurobiology of Language*. Baltimore, ML.
- **Xie, X.,** Myers, E. B. (September, 2017). Inferior frontal gyrus activation is modulated by phonetic competition: An fMRI study of clear and conversational speech. Talk to be presented at *The 23rd Architectures and Mechanisms for Language Processing*. Lancaster, United Kingdom.
- Oye, L., Lee, C., Simon, E., **Xie, X.**, & Jaeger, T. F. (2017). Talker generalization of accent adaptation: Questioning its robustness. Poster to be presented at *The 23rd Architectures and Mechanisms for Language Processing*. Lancaster, United Kingdom.
- Lee, C., Oye, L., Simon, E., **Xie, X.**, & Jaeger, T. F. (2017). An Investigation into Audio Perception Studies on Amazon Mechanical Turk. Poster to be presented at *The 23rd Architectures and Mechanisms for Language Processing*. Lancaster, United Kingdom.
- Liu, L., **Xie, X.,** Weatherholtz, K., & Jaeger, T. F. (2017). Talk presented at *The 30th Annual CUNY Conference on Human Sentence Processing*. Cambridge, MA.
- **Xie, X.,** Myers, E. B. (December, 2016). Sleep facilitates talker generalization of accent adaptation. Poster presented at *The 172nd Annual Meeting of the Acoustical Society of America*. Honolulu, HI.
- **Xie, X.,** Myers, E. B. (March, 2016). Learning a talker or learning an accent? Cross-talker generalization of phonetic adjustment to foreign-accented speech. Poster presented at *The 29th Annual CUNY Conference on Human Sentence Processing*. Gainesville, FL.
- **Xie, X.,** Theodore, R. M., Myers, E. B. (November, 2015). Perceptual adaptation to foreign-accented speech reshapes the internal structure of phonetic categories. Poster presented at *The 56th Annual Meeting of the Psychonomic Society*. Chicago, IL.
- **Xie, X.,** & Myers, E. B. (July, 2015). General language ability predicts talker identification. Poster presented at *The 37th Annual Meeting of the Cognitive Science Society*. Pasadena, CA.
- **Xie, X.** & Myers, E. B. (November, 2014). Individual differences in talker identification: Do musical experience and linguistic background matter? Poster presented at *The 55th Annual Meeting of the Psychonomic Society*. Long beach, CA.
- Xie, X. & Myers, E. B. (September, 2013). The role of language and musical experience in talker identification: investigating language familiarity effect. Poster presented at *The 19th International Conference of Architectures and Mechanisms for Language Processing* (AMLaP, 2013). Marseille, France.
- **Xie, X.** & Fowler, C. A. (July, 2013). Listening with a foreign-accent: The interlanguage speech intelligibility benefit in Mandarin speakers of English. Poster presented at *Linguistic Society of America*, Summer Institute 2013 Workshop: How the brain accommodates variability in linguistic representations. Ann Arbor, MI.

INVITED TALKS

The adaptive road to robust speech recognition: How do we accommodate phonetic variation in speech? *Department of Linguistics, University of California, Davis. January 2017.*

Encoding articulator information in the brain during speech perception. Alvin and Isabelle Liberman Memorial Workshop, University of Connecticut, June 2016.

Phonetic adaptation to foreign accents. *Department of Speech, Language and Hearing Sciences, Boston University, December 2015.*

Phonetic adaptation to foreign accents. *Bilingualism and Psycholinguistics Research Group*, Northwestern University, October 2015.

HONORS & AWARDS

2017	Fellowship: Kavli Summer Institute in Cognitive Neuroscience, UC Santa
	Barbara
2015	Psychonomic Society Graduate Student Travel Award, Psychonomic Society
2014	Doctoral Dissertation Fellowship: Graduate School, University of Connecticut
2013	Conference Travel Grant: Graduate School, University of Connecticut
2013	Student Travel Award: LSA 13 workshop "How the brain accommodates
	variability in linguistic representations"
2009-2015	Graduate Scholarship: Department of Psychology, University of Connecticut
2009	Award for Excellence in Undergraduate Thesis, Zhejiang University

TEACHING EXPERIENCE

assignments

2012-2016	Research Mentor, 12 Undergraduates
	Mentored undergraduate students who were research assistants and/or completing
	honors theses. Taught experimental design, acoustic analysis techniques, and
	other aspects of training in conducting research
Spring 2015	Coordinator, Language & Cognition Seminar
	Coordinated seminar talks
Spring 2015	Teaching Assistant, Psychology of Language
	Held office hours, graded exams, papers and assignments
Spring 2014	Instructor of Record, Psychology of Language
	Gave lectures (~50 students), designed course materials, wrote and graded exams
2010-2013	Lab Instructor, Principles of Research in Psychology
	Gave weekly lectures (~12-14 students), mentored group research projects, held
	office hours, graded papers and assignments, assisted student poster presentation
	at a department-level research event
2009-2010	Lab Instructor, General Psychology I
	Gave weekly lectures (~20-25 students), held office hours, wrote/graded

Fall 2009 Teaching Assistant, General Psychology I; Cognitive Psychology
Graded exams and assignments, prepared materials for online mini-experiments

PROFESSIONAL SERVICE & MEMBERSHIPS

Ad hoc reviewer: Journal of Experimental Psychology: Human Perception and Performance, Psychonomic Bulletin & Review, Cognition, Cognitive Science Society Annual Conference, The Quarterly Journal of Experimental Psychology, Journal of the Acoustical Society of America, Journal of Speech, Language and Hearing Research, language and Speech, Linguistics Vanguard, Laboratory Phonology

Membership: Society for the Neurobiology of Language; Acoustical Society of America; Association for Laboratory Phonology; Psychonomic Society; International Speech Communication Association; Women in Cognitive Science

LANGUAGES

Mandarin Native PRAAT (Acoustic analysis) English **Proficient SPSS** Cantonese Proficient R Japanese Intermediate **MATLAB** Spanish Basic vocabulary Python French Basic vocabulary

REFERENCES

1) Florian Jaeger, Ph.D.

Department of Brain and Cognitive Sciences University of Rochester Meliora Hall, Rochester, NY 14627 fjaeger@bcs.rochester.edu 585-276-3611

2) Emily Myers, Ph.D.

Department of Speech, Language, and Hearing Sciences University of Connecticut 850 Bolton Road, Storrs, CT 06269 Emily.Myers@uconn.edu 860-486-2630

3) Carol Fowler, Ph.D.

PROGRAMMING

Department of Psychology University of Connecticut 406 Babbidge Road, Storrs, CT 06269 Carol.Fowler@yale.edu

4) Rachel Theodore, Ph.D.

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