

Richard Wright

Associate Professor and Phonetics Laboratory Director
University of Washington, Department of Linguistics
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Education

- 1996 Ph.D. in Linguistics, UCLA
“Consonant clusters and cue preservation in Tsou”
Committee chair: Patricia Keating
- 1993 MA in Linguistics, UCLA.
“Trading relations and informational models”
Committee chair: Patricia Keating
- 1986 BA with honors in French, African studies certificate, Michigan State University

Relevant Employment and Academic Appointments

- 2012-pres. Professor, Phonetics Lab Director, Department of Linguistics, University of Washington
Adjunct Professor, Department of Speech and Hearing Sciences, University of Washington
- 2004-2012 Associate Professor, Phonetics Lab Director, Department of Linguistics, University of Washington
Adjunct Associate Professor, Department of Speech and Hearing Sciences, University of Washington
- 2009 Linguistic Society of America Summer Institute invited instructor, June 6th-August 13th UC Berkeley, Berkeley CA <http://lsa2009.berkeley.edu/>
- 1998-2004 Assistant Professor, Phonetics Lab Director, Department of Linguistics, University of Washington
- 2003 Linguistic Society of America Summer Institute instructor, June 30th-August 8th Michigan State University, East Lansing, MI <http://lsa2003.lin.msu.edu/>
- 1996-1998 NIH Postdoctoral Research Fellow, Indiana University Department of Psychology, Speech Research Laboratory. Supervisor: David Pisoni.
- 1986-1988 U.S. Peace Corps Volunteer: Kenya, Secondary Education

Research Grants and Contracts

- pending NSF-CISE (Directorate for Computer & Information Science & Engineering):
EAGER: ATAROS – Automatic Tagging and Recognition of Stance
Amount: \$249,975
P.I. Gina Levow
Role: Co-P.I.
- 2010-2015 Northwestern University: Acoustic and perceptual effects of WDRC amplification

- Amount: \$382,925
Role: P.I. (NIH R01 Subcontract)
- 2010 Northwestern University: Acoustic and perceptual effects of WDRC amplification
Amount: \$49,564
Role: P.I. (NIH R01 Subcontract)
- 2009-2010 UW Royalty Research Fund Grant: PHOIBLE: PHOnetics Information Base and Lexicon
Amount: \$36,661
Role: P.I.
- 2005-2010 NIH R01: Acoustic and perceptual effects of WDRC amplification
Amount: \$1,116,480
P.I. Pamela Souza
Role: Collaborator
- 2004-2007 NSF IT 0326382: The vocal joystick: continuous control parameters with the human voice
Amount: \$1,240,000
P.I. Jeffrey Bilmes, UW Dept. of Electrical Engineering
Role: Co-P.I.
- 2003-2006 Endangered Languages Documentation Programme, Univ. of London School of Oriental and African Studies: Aleut conversation corpus.
Amount: \$145,863
Role: Supervising P.I. with Alice Taff, post-doc, UW Dept. of Linguistics
- 2003 UW Royalty Research Fund Grant: An annotated database of speech style variation
Amount: \$39,600
Role: P.I.
- 2002 IBM: ToBI labeling of the IBM read speech corpus for speech synthesis
Amount: \$10,000
Role: P.I.
- 2001 CMBL research affiliate grant: Variability in language production and perception: a cross-linguistic investigation of motherese, hyperspeech, and Lombard speech.
Co-P.I. with Alicia Beckford Wassink, UW Dept. of Linguistics
Amount: \$101,788

Service and Teaching Grants

- 2010 Student Technology Fee 2010-063-1: Phonetics and Sociolinguistics Lab Upgrade
Amount: \$16,896
Role: Faculty Lead with Alicia Beckford Wassink, UW Linguistics
- 2004 Student Technology Fee 2004-098-1: Portable CD recorders and Editing/Analysis stations for Student Research
Amount: \$ \$24,571.00
Role: Faculty Lead

- 2001 Simpson Center for the Humanities Grant: Keynote speakers funding for WECOL
Amount: \$1,236
Role: Conference Organizer
- 2000 UW Arts and Sciences Curriculum Development Grant: Interactive Multimedia
Linguistics.
Amount: \$27,722
Role: Co-developer with Julia Herschensohn, Alicia Beckford Wassink, and
Karen Zagona UW Linguistics.

Peer reviewed journal and series articles

- manuscript: McCloy, D., Wright, R., and Souza, P. Models of intelligibility variation: Prosodic and vowel-space predictors. (submitted: The Journal of the Acoustical Society of America)
- Souza, P., Gehani, N., Wright, R., and McCloy, D. (2013). The advantage of knowing the talker, *Journal of the American Academy of Audiology*, Volume 24, Number 8, pp. 689-700.
- Moran, S., McCloy, D.R., and Wright, R. A. (2012). Revisiting population size vs. phoneme inventory size. *Language*, **88** (4): 877-893. (30%)
- Souza, P., Wright, R., and Bor, S., (2012). Combined multichannel compression and reduced frequency selectivity for vowel identification. *Journal of Speech Language and Hearing Research*, **55**: 474-486. (40%)
- Wright, R., and Souza, P. (2012). Comparing identification of standardized and regionally-valid vowels. *Journal of Speech Language and Hearing Research*. **55** (1): 182-193. (80%)
- Friesen L M; Tremblay K L; Rohila N; Wright R A; Shannon R V; Baskent D; Rubinstein J T (2009). Evoked cortical activity and speech recognition as a function of the number of simulated cochlear implant channels. *Clinical neurophysiology*. **120** (4): 776-82. (20%)
- Bor S, Souza P, Wright R. (2008). Multichannel compression: Effects of reduced spectral contrast on vowel identification. *Journal of Speech Language and Hearing Research*, **51**: 1315-27. (33%)
- Harnsberger, J., Wright, R., and Pisoni, D.B. (2008). A new method for eliciting speech styles in the laboratory, *Speech Communication*, **50**: 323-336. (40%)
- Wassink, A. B., Wright, R. and Franklin, A. (2007) Intraspeaker variability in vowel production: an investigation of motherese, hyperspeech, and Lombard speech in Jamaican speakers, *Journal of Phonetics*, **35** (3): 353-379. (40%)
- Bates, R., Ostendorf, M, and Wright, R. (2007). Symbolic phonetic features for modeling of pronunciation variation, *Speech Communication*, **49**: 83-97. (30%)
- Johnson, K., Flemming, E., Wright, R. (2004) Response to Whalen et al. *Language* **80** (4): 646-648. (30%)
- Wright, R., (2003). Factors of lexical competition in vowel articulation, in John Local, Richard Ogden & Rosalind Temple (Eds.), *Phonetic Interpretation: Papers in Laboratory Phonology VI*. Cambridge: CUP, pp 75-87.

- Tremblay, K., Friesen, L., Martin, B.A., and Wright, R. (2003). Test-retest reliability of cortical evoked potentials using naturally-produced speech sounds. *Ear and Hearing*, **24:3**, pp. 225-232. (20%)
- Wright, R., Hargus, S., and Davis, K. (2002). On the categorization of ejectives: data from Witsuwit'en. *Journal of the International Phonetic Association*, **32:1**, pp. 43-77. (40%)
- Frisch, S. and Wright, R. (2002). The phonetics of phonological speech errors: An acoustic analysis of slips of the tongue. *Journal of Phonetics*, **30**, pp. 139-162. (50%)
- Harnsberger, D., Svirsky, M., Kaiser, A. Pisoni, D., Wright, R., Meyer, T., (2001). Perceptual "vowel spaces" of cochlear implant users: Implications for the study of auditory adaptation to spectral shift. *Journal of the Acoustical Society of America*, **109:5**, pp. 2135-2145. (30%)
- Wright, R., and Ladefoged, P. (1997). A phonetic study of Tsou. *Bulletin of the Institute of History and Philology, Academia Sinica*, **68:4**, pp. 987-1028. (80%)
- Johnson, K., Flemming, E., and Wright R. (1993). The hyperspace effect: Phonetic targets are hyperarticulated. *Language*, **69:3**, pp. 505-528. (30%)
- Wright, R. and Shryock, A. (1993). The effects of implosives on pitch in SiSwati. *Journal of the International Phonetic Association*, **23:1**, pp. 16-23. (75%)

Refereed book chapters and collections

- Henke, E., Kaisse, E., and Wright, R., (to appear) Is the Sonority Sequencing Principle an epiphenomenon? In S. Parker (Ed.) *The Sonority Controversy*. Berlin: De Gruyter, pp. 65-100. (33%)
- Osterhout, L., Wright, R., and Allen, M. D. (2008). The psychology of linguistic form. In P.C. Hogan (Ed.), *The Cambridge Encyclopedia of Language Sciences*. (33%)
- Wright, R. (2005). Experimental phonology. In K. Brown (Ed.), *Encyclopedia of Language and Linguistics*, 2nd Edition. Cambridge: Elsevier.**pp
- Wright, R., (2004). A review of perceptual cues and cue robustness, In B. Hayes, R.Kirchner, and D.Steriade (eds.) *Phonetically Based Phonology*, pp. 34-57. Cambridge: Cambridge University Press.**pp
- Wright, R., (2001). Perceptual cues in contrast maintenance. In E. Hume and K. Johnson (Eds.) *The role of speech perception in phonology*, pp. 251-277. San Diego: Academic Press.
- Wright, R., (1999). Tsou consonant clusters and auditory cue preservation. Selected Papers from the Eighth International Conference on Austronesian Linguistics: Symposium Series of the Institute of Linguistics, Academia Sinica, **1**, pp. 277-312.
- Wright, R., Frisch, S., and Pisoni, D. (1999). Speech perception. In J. Webster (ed.), *Encyclopedia of electrical and electronics engineering*, pp. 175-195. New York: John Wiley and Sons. (50%)

Papers in refereed conference proceedings – full paper review

- Kelley Kilanski, Jonathan Malkin, Xiao Li, Richard Wright and Jeff Bilmes, "The Vocal Joystick Data Collection Effort and Vowel Corpus," Interspeech, Pittsburgh, Sep. 2006 (20%)

- Xiao Li, Jonathan Malkin, Susumu Harada, Jeff Bilmes, Richard Wright and James Landay, "An Online Adaptive Filtering Algorithm for the Vocal Joystick," *Interspeech*, Pittsburgh, Sep. 2006 . (20%)
- Richard Wright, "Intra-speaker variation and units in human speech perception and ASR," *ITRW on Speech Recognition and Intrinsic Variation Workshop (SRIV 2006)*, Toulouse, France, May, 2006 - Keynote address.
- Jeff Bilmes, Jonathan Malkin, Xiao Li, Susumu Harada, Kelley Kilanski, Katrin Kirchhoff, Richard Wright, Amarnag Subramanya, James Landay, Patricia Dowden, Howard Chizeck, "The Vocal Joystick," *IEEE Intl. Conf. on Audio, Speech and Signal Processing*, Toulouse, France, May, 2006. (10%)
- Jeff A. Bilmes, Xiao Li, Jonathan Malkin, Kelley Kilanski, Richard Wright, Katrin Kirchhoff, Amarnag Subramanya, Susumu Harada, James A. Landay, Patricia Dowden and Howard Chizeck, "The Vocal Joystick: A Voice-Based Human-Computer Interface for Individuals with Motor Impairments," *Human Language Technology Conf. and Conf. on Empirical Methods in Natural Language Processing*, Vancouver, Canada, Oct, 2005. (10%)
- Jeff A. Bilmes, Xiao Li, Jonathan Malkin, Kelley Kilanski, Richard Wright, Katrin Kirchhoff, Amarnag Subramanya, Susumu Harada, James A. Landay, Patricia Dowden and Howard Chizeck, "The Vocal Joystick Demo at UIST05: A Voice-Based Human-Computer Interface," *Proceedings of the 18th Annual ACM Symp. on User Interface Software and Technology*, Seattle, Oct, 2005. (10%)
- Shafran, I, Ostendorf, M., and Wright, R. (2001) Prosody and phonetic variability: Lessons learned from acoustic model clustering *Proc. ISCA Workshop on Prosody in Speech Recognition and Understanding*, pp. 127-131. (20%)

Working papers and technical reports

- Jeff A. Bilmes, Xiao Li, Jonathan Malkin, Kelley Kilanski, Richard Wright, Katrin Kirchhoff, Amarnag Subramanya, Susumu Harada, James A. Landay, Patricia Dowden and Howard Chizeck. (2005). The Vocal Joystick: A Voice-Based Human-Computer Interface for Individuals with Motor Impairments. *University of Washington, Department of Electrical Engineering, Technical Report UWEETR-2005-0007*.
- Harnsberger, J., Wright, R., and Pisoni, D. B. (2000). Effects of speaking style on the perceptual learning of novel voices: A first report. In *Research on Spoken Language Processing Progress Report No. 24*, pp. 169-188. Bloomington, IN: Speech Research Laboratory, Indiana University.
- Keating, P., Wright, R., and J. Zhang, (1999). Word level asymmetries in consonant articulation. *UCLA Working Papers in Phonetics*, **97**, pp. 157-173.
- Quillet, C., Wright, R. and Pisoni, D. B. (1998). Perception of "place-degraded speech" by normal-hearing listeners: Some preliminary findings. In *Research on Spoken Language Processing Progress Report No. 22*, pp. 354-375. Bloomington, IN: Speech Research Laboratory, Indiana University.
- Brink, J., Wright, R., and Pisoni, D.B. (1998). Eliciting speech reduction in the laboratory: Assessment of a new experimental method. In *Research on Spoken Language Processing*

Progress Report No. 22, pp. 396-420. Bloomington, IN: Speech Research Laboratory, Indiana University.

Bowdle, B. F. and R. Wright (1998). Lexical neighborhoods and subjective intelligibility ratings: a preliminary report. In *Research on Spoken Language Processing Progress Report No. 22*, pp. 345-352. Bloomington, IN: Speech Research Laboratory, Indiana University.

Wright, R. (1996). Tone and accent in Oklahoma Cherokee. *UCLA Occasional Papers in Linguistics*, **16**, pp. 11-22.

Wright, R., I. Maddieson, P. Ladefoged and B. Sands (1995). A phonetic study of Sandawe clicks. *UCLA Working Papers in Phonetics*, **91**, pp. 1-24.

Maddieson, I. and R. Wright (1995). The consonants and vowels of Amis - a preliminary report. *UCLA Working Papers in Phonetics*, **91**, pp. 45-65.

Wright, R. (1992). Trading relations and informational models. *UCLA Working Papers in Phonetics*, **83**, pp 75-95.

Book Reviews

Endangered Languages in Africa. Edited by Matthias Brenziger. Rüdiger Köppe Verlag: Köln, 1998. Pp. 284. For *Newsletter of the Endangered Language Fund*

Work in Progress

Preamble (if I may) I am interested in 3 areas of phonetics, which sometimes overlap. My primary interest is in understanding sources of systematic variation in the production and perception of language, and how it relates to language universals and language structure (i.e. Language). To this end I have spent quite a bit of time trying to understand factors that affect the pronunciation of spoken languages (and I dream of extending this research to signed languages as well). These factors include: lexical characteristics (such as type and token frequency, phonological neighborhood density, sociolinguistic traits of words, etc.), discourse and pragmatic factors (such as word/phrase entropy, stance, and contextual factors such as audience), intonational factors, how the perceptual needs of the listener shape the pronunciation strategies of the talker, language specific phonological and phonetic factors such as the number and type of phonological contrasts in a language, and the native language of a particular talker. As part of this enterprise I have spent a lot of my research time on trying to understand perceptual adaptation to distortion in linguistic contexts — distortion can come in many guises: hearing loss, noise, changes in attention, and linguistic distortion such as unfamiliar accents or dialects. Another piece of this puzzle is how humans use or are impeded by variation in learning. The last piece of this puzzle for me is description of the range of variation attested in languages at a detailed phonetic/acoustic level. For me languages that are in danger of disappearing are of extreme importance; without a good sense of how languages vary, not only in terms of the symbolic units such as phonemes and allophones but also in the details of their phonetic implementation, we have little hope of understanding the possible range of language. Endangered languages, and lesser-studied languages, represent important but often-ignored source of information about what is possible in Language.

There are 3 large projects that have consumed much of my time since tenure:

- 1 – Speech perception under conditions of distortion related to hearing loss and hearing aid processing. This relates to my last 6 years of research on the WDRC amplification grant.
- 2 – Language typology and linguistic universals. This relates to the PHOIBLE grant and knowledge base, as well as phonetic description of languages.
- 3 – The role of perceptual factors in shaping linguistic universals (phonological, phonetic). This relates to my interest in the role of perception in syllable structure universals as well as perceptual learning.

One large project has begun to take up a large part of my research interest: the effect of discourse and pragmatics on intonation and pronunciation variation. This relates to work that I have done with Gina Levow and with Valerie Freeman.

Work in progress that is at or near writing – submission – revision stage:

- Hargus, S., and Wright, R. (under revision for new submission). Deg Xinag fricatives. (target: *Journal of Phonetics*). (Contribution: 50%)
- Kirchner, R. and Wright, R. (under revision) Exemplar phonology. *Language and Linguistics Compass*. (Contribution 50%)
- Maddieson, I. and Wright, R. (in progress). The consonants and vowels of Amis. (Target: *Language and Linguistics*) (Contribution 50%)
- Maddieson, I., Zhang, J., Wright, R., (in progress). The phonetic patterns of an Atayal dialect. (Target: *Language and Linguistics*) (Contribution 30%)
- Maddieson, I., Zhang, J., Wright, R., (in progress). The phonetic patterns of Bunun. (Target: *Language and Linguistics*) (Contribution 30%)
- Wright, R. (in progress). The locus of high variability training effects in non-native phoneme learning. (target: *Journal of Phonetics*)
- Wright, R., Ladefoged, P., Maddieson, I., and Sands, B., (in progress). (Target: *Journal of the International Phonetic Association*) (Contribution 33%)
- Wright, R., McCloy, D., Souza, P., (in progress). Dialect familiarity and speech intelligibility, a symmetrical study. (target: *Journal of the Acoustical Society of America*). (Contribution: 50%)
- Wright, R., Zhang, J., and Keating, P., (under revision). Word level asymmetries in consonant articulations. *Phonetica*. (Contribution 40%)

Invited Talks and Colloquia

- 2012 Richard Wright, “Exploring sources of individual variability in intelligibility”
Invited colloquium presented at the University of Washington Dept. of Speech and Hearing Sciences, May 4, 2012.
- 2012 Richard Wright, “The role of inter- vs. intra-talker variation in perceptual training”
Invited Phonetics Group talk presented at Northwestern University Dept. of Linguistics, February 8, 2012.

- 2011 Richard Wright, “The role of inter- vs. intra-talker variation in perceptual training” Invited colloquium talk presented at the University of Washington Dept. of Speech and Hearing Sciences, February 18, 2011.
- 2010 Richard Wright, “Does style matter? Multi-talker effects in non-native word learning” Invited colloquium talk presented at the University of Washington Dept. of Linguistics, November 19, 2010.
- 2010 Richard Wright, “Multitalker effects in non-native word learning” Invited colloquium talk presented at the University of Oregon Dept. of Linguistics, Eugene, Oregon, May 7, 2010.
- 2010 Richard Wright, “The locus of multitalker effects: Learning words with non-native sounds” Invited colloquium talk presented at the University of Alberta Dept. of Linguistics, Edmonton, Alberta, March 12, 2010.
- 2008 The old phonetics-phonology limbo: how low can your grammar go? Colloquium presented at the UC Santa Cruz Department of Linguistics, April 25, 2008.
- 2008 Probing lexical effects in speech production: beyond words in isolation. Colloquium presented as part of the UW Psychology Cognition and Perception Series.
- 2008 How does phonetics fit in phonology? Invited talk at the Simon Frasier University *Phonology Fest 2008*, Burnaby, BC, April 5, 2008.
- 2006 The advantage of featural approaches to the problem of speaker internal variation. Keynote address for the *Speech recognition and Intrinsic Variation Workshop*, a satellite of *IEEE Intl. Conf. on Audio, Speech and Signal Processing*, Toulouse, France, May, 2006.
- 2005 Simon Frasier University (with Alicia Beckford Wassink, Lisa Galvin, and Lesley Carmichael) “Motherese, hyperarticulation, and the Lombard response: Comparing listener-based adaptations”
- 2004 University of Washington, Department of Linguistics (with Evie Tops and Hans Van der Velde, Vrije Universiteit Brussel, Universiteit Utrecht) “A rhotic journey: trill seeking in Flanders”
- 2004 University of British Columbia, Department of Linguistics (with Evie Tops* and Hans Van der Velde*[±], *Vrije Universiteit Brussel, [±]Universiteit Utrecht) “Acoustic va-R-iation in Dutch”
- 2003 University of Pittsburgh, Department of Linguistics (with Alicia Beckford Wassink, Lisa Galvin, and Lesley Carmichael) “Putting motherese in its place: comparing child directed speech to other listener-based speaking adjustments”
- 2002 University of Washington, Department of Linguistics (with Sharon Hargus) “Variation in ejectives: the case of Witsuwit’en”
- 2001 University of Washington, Department of Linguistics “Position in word and manner effects on coarticulation: Tsou”
- 2001 University of Alberta, Edmonton, Dept. of Linguistics “Sources of predictable variability in spoken language”

- 2001 IUPUI Indianapolis Medical School, Department of Otolaryngology
“CI users’ vowels: Comparing production and perception spaces”
- 2000 University of Washington, Department of Electrical Engineering
“Variation in Spoken Language: Listener Based Factors”
- 2000 University of British Columbia, Department of Linguistics
“Rethinking phonotactic constraints: perceptual underpinnings”
- 2000 University of Washington, Department of Linguistics
“Perception and phonotactics”
- 1999 IUPUI Indianapolis Medical School, Department of Otolaryngology
“Vowel perception and basal shift in a CI population”
- 1997 International Computer Science Institute, University of California, Berkeley
“Output vs system oriented behavior in spoken language: Lexical competition and reduction in vowels”
- 1997 Stanford University, Center for Computer Research in Music and Acoustics
“Output vs system oriented behavior in spoken language: Lexical competition and reduction in vowels”
- 1997 University of Rochester, Department of Linguistics
“Talker-hearer interactions in spoken language: Consonant clusters in Tsou”
- 1997 Michigan State University, Dept. of Linguistics and Languages
“Perceptual context limitations on consonant articulations”
- 1997 University of Michigan, Program in Linguistics
“Consonant clusters and cue preservation in Tsou”
- 1996 Indiana University, Department of Psychology
“The role of auditory perception in syllable organization”
- 1996 The Ohio State University, Department of Linguistics
“Syllable structure and the distribution of auditory cues: the case of Tsou”

Conference Presentations

- 2012 Tian Christina Zhao, Richard Wright, and Patricia Kuhl, “Modeling Mandarin tone 2 and tone 3 from natural productions with variability” *163rd Meeting of the Acoustical Society of America*, Hong Kong, 14 May, 2012.
- 2012 Steve Moran, Dan McCloy, and Richard Wright. “Revisiting the population vs phoneme-inventory correlation” *86th Meeting of the Linguistic Society of America*, Portland, OR, January 6, 2012.
- 2011 Richard Wright. “Intra- vs inter-talker effects in perceptual training” *161st Meeting of the Acoustical Society of America*, Seattle, WA, 27 May, 2011.
- 2011 Christina DiFrancisci, Jongho Won, Kelley Tremblay, Richard Wright, “Native Language Experience Influences the Perception of Envelope and Temporal Fine Structure Cues” *161st Meeting of the Acoustical Society of America*, Seattle, WA, 26 May, 2011.

- 2009 Maria Burgess, Richard Wright, and Guadalupe Lopez, “An Acoustic Description of Santiago Tamazola Lowlands Mixtec”, *SSILA Summer Conference*, Berkeley, CA, July 17, 2009.
- 2008 Richard Wright, Pamela Souza, Stephanie Bor, and Star Reed. “Consequences of regional accent differences for hearing studies” *Second Acoustical Society of America — European Acoustics Association*, Paris, France, June. 28 — July 4, 2008.
- 2008 Stephanie Bor, Pamela Souza, Richard Wright, Auditory filters and vowel errors. International Hearing Aid Conference, Tahoe City, CA, August 13-17, 2008
- 2006 Rebecca Bates, Mari Ostendorf, and Richard Wright, “Symbolic features for pronunciation modeling.” *Fourth joint meeting of the Acoustical Society of America and the Acoustical Society of Japan*, Honolulu, Nov. 28 — Dec. 3, 2006.
- 2006 Richard Wright, Stephanie Bor, and Pamela Souza, “Region, gender, and vowel quality: A word to the wise hearing scientist.” *Fourth joint meeting of the Acoustical Society of America and the Acoustical Society of Japan*, Honolulu, Nov. 28 — Dec. 3, 2006.
- 2006 Kelley Kilanski, Jonathan Malkin, Xiao Li, Richard Wright and Jeff Bilmes, "The Vocal Joystick Data Collection Effort and Vowel Corpus," Interspeech, Pittsburgh, Sep. 2006
- 2006 Xiao Li, Jonathan Malkin, Susumu Harada, Jeff Bilmes, Richard Wright and James Landay, "An Online Adaptive Filtering Algorithm for the Vocal Joystick," Interspeech, Pittsburgh, Sep. 2006
- 2006 Kelley Kilanski and Richard Wright, “A corpus based investigation of lexical and frequency effects on /s/ in American English,” *The 10th Conference on Laboratory Phonology: Variation, Detail and Representation*, Paris, June 29 – July 1, 2006.
- 2006 Jeff Bilmes, Jonathan Malkin, Xiao Li, Susumu Harada, Kelley Kilanski, Katrin Kirchhoff, Richard Wright, Amarnag Subramanya, James Landay, Patricia Dowden, Howard Chizeck, “The Vocal Joystick,” *IEEE Intl. Conf. on Audio, Speech and Signal Processing*, Toulouse, France, May, 2006
- 2006 Bor S, Souza P, Wright R. “Effect of Multiple Compression Channels on Vowel Identification.” *International Hearing Aid Research Conference*, Tahoe City, CA.
- 2006 Stephanie Bor, Pamela Souza, and Richard Wright, “Multichannel Compression: Consequences Of Reduced Spectral Contrast For Vowel Identification,” Poster presented at the *American Auditory Society annual meeting*, Scottsdale, AZ, March 5-7, 2006.
- 2006 Kelley Kilanski and Richard Wright, “The effect of lexical factors on consonant variation”, *Symposium on phonetic variation: What does it mean to speakers and listeners? at the 80th Annual Meeting of the Linguistic Society of America*, Albuquerque, NM, January, 2006
- 2005 Jeff A. Bilmes, Xiao Li, Jonathan Malkin, Kelley Kilanski, Richard Wright, Katrin Kirchhoff, Amarnag Subramanya, Susumu Harada, James A. Landay, Patricia Dowden and Howard Chizeck. The Vocal Joystick: “A Voice-Based Human-Computer Interface for Individuals with Motor Impairments,” Human Language Technology Conf. and Conf. on Empirical Methods in Natural Language Processing, Vancouver, BC, October 2005.

- 2005 Jeff A. Bilmes, Xiao Li, Jonathan Malkin, Kelley Kilanski, Richard Wright, Katrin Kirchhoff, Amarnag Subramanya, Susumu Harada, James A. Landay, Patricia Dowden and Howard Chizeck, "The Vocal Joystick Demo at UIST05: A Voice-Based Human-Computer Interface," *the 18th Annual ACM Symp. on User Interface Software and Technology*, Seattle, Oct, 2005
- 2005 Friesen L.M., Tremblay K.L., Rohila N., Wright R., Shannon R.V. and Baskent D. Speech Evoked Cortical Potentials as a Function of Cochlear Implant Channel Number. Paper presented at the Conference on Implantable Auditory Prostheses, Pacific Grove, CA, (August, 2005)
- 2005 Friesen L., Tremblay K.L., Rohila N., Wright R., Shannon R. and Baskent D. Speech Evoked Cortical Potentials as a Function of Cochlear Implant Channel Number. Association for Research in Otolaryngology. New Orleans, LA (2005)
- 2005 Wright, R., Hargus, S., and Miller, J. "Comparing the acoustics of voiced and voiceless fricatives in Deg Xinag." *150th meeting of the Acoustical Society of America*, Minneapolis, MN, October 2005.
- 2005 Bor S, Wright R, Souza P. (2005). Effect of multiple compression channels on vowel spectra. *150th meeting of the Acoustical Society of America*, Minneapolis, MN, October 2005.
- 2005 Ingle, J. K., Wright, R. A., and Wassink, A. B. "Pacific Northwest vowels: A Seattle neighborhood dialect study." 149th meeting of the Acoustical Society of America, Vancouver, BC, May 2005.
- 2005 Wright, R., Hargus, S., and Miller, J. "An acoustic study of Deg Xinag fricatives." 149th meeting of the Acoustical Society of America, Vancouver, BC, May 2005.
- 2004 Wright, R., Carmichael, L., Wassink, A.B., & Galvin, L. "Child directed speech, speech in noise and hyperarticulated speech in the Pacific Northwest." 147th Meeting of the Acoustical Society of America, New York, NY, May 2004.
- 2003 Carmichael, L., Wright, R., Wassink, "Developing a corpus of spoken language variability." 146th Meeting of the Acoustical Society of America, Austin, TX, November, 2003.
- 2003 A. Wassink, R. Wright, L. Galvin and A. Franklin, "Intraspeaker variability in vowel production: an investigation of motherese, hyperspeech, and Lombard speech in Jamaican speakers." The 15th International Congress of Phonetic Sciences, Barcelona, August 2003.
- 2003 Tremblay, K.L., Friesen, L., Martin, B.A., and Wright, R. Test- retest reliability of the acoustic change complex using naturally-produced speech sounds. International Evoked Response Study Group, Tenerife, June 2003.
- 2002 R. Wright and G. Webster, "Noise, attention and context: some problems for a cue-based approach to speech perception" Invited talk at the Ninth Annual Linguistics Symposium, Rice University, Houston, Texas, March 2002.
- 2001 I. Shafran, M. Osetndorf, and R. Wright, "Prosody and phonetic variability: Lessons learned from acoustic model clustering" *Proc. ISCA Workshop on Prosody in Speech Recognition and Understanding*, October 2001.

- 2001 R. Wright, J. Harnsberger, D. B. Pisoni, M. Svirsky, and A. Kaiser, "Comparing perception and production vowel spaces of cochlear implant users." 141st Meeting of the Acoustical Society of America, Chicago, IL, December 2001.
- 2001 J. Harnsberger, D. B. Pisoni, and R. Wright, "Eliciting speech styles in the laboratory: Acoustic and perceptual analyses." 141st Meeting of the Acoustical Society of America, Chicago, IL. *Journal of the Acoustical Society of America*. May, 2001.
- 2001 A. Skinder-Meredith, C. Stoel-Gammon, R. Wright, & E. Strand. "The effect of articulatory accuracy on prosody in children with developmental apraxia of speech." Poster presented to the American Speech-Language and Hearing Association, New Orleans, LA, November 2001.
- 2000 J. Harnsberger, D. B. Pisoni, and R. Wright, "Eliciting speech styles in the laboratory: Assessment of a new experimental method." 140th Meeting of the Acoustical Society of America, Newport Beach, CA, December 2000.
- 2000 A. Skinder, C. Stoel-Gammon, R. Wright, and C. Betz. The relationship between prosodic and articulatory error in developmental apraxia of speech. Technical session presented to the American Speech-Language and Hearing Association, Washington D.C., November 2000.
- 2000 J. Harnsberger, D. B. Pisoni, M. Svirsky, A. Kaiser, and R. Wright, "The vowel spaces of normal-hearing listeners and patients with cochlear implants." 139th Meeting of the Acoustical Society of America, Atlanta, GA, June 2000.
- 1999 R. Hagiwara, S. Hargus, R. Wright, and I. Sterling, "An interactive atlas of English vowels: Design considerations." 138th Meeting of the Acoustical Society of America, Columbus, OH, November, 1999.
- 1999 R. Wright, "Perceptual cues in contrast maintenance." *The Role of Perception in Phonology*, Satellite Meeting of the International Congress of Phonetic Sciences, San Francisco, CA, August 1999.
- 1998 S. Frisch and R. Wright, "Implications of featural and sub-featural errors in speech production." 72nd annual meeting of the Linguistic Society of America. New York, NY, January, 1998.
- 1998 R. Wright "Lexically motivated hypo- and hyper-articulation in vowels." 72nd annual meeting of the Linguistic Society of America. New York, NY, January 1998.
- 1997 S. Frisch and R. Wright "Phonetic variability in /s/ and /z/ errors: A multitalker acoustic study." 134th Meeting of the Acoustical Society of America, San Diego, CA, December, 1997.
- 1997 R. Wright "Communicative factors in Speech variation: Hyperarticulatory compensation for lexical competition." 134th Meeting of the Acoustical Society of America, San Diego, CA, December, 1997.
- 1997 R. Wright and S. Frisch "Acoustic evidence for featural and sub-featural errors in speech production." 133rd Meeting of the Acoustical Society of America, State College, PA, June 1997.

- 1997 R. Wright “Tsou consonant clusters and auditory cue preservation.” 8th international conference on Austronesian linguistics. Taipei, Taiwan. December 1997.
- 1996 R. Wright “Sonority violations and temporal stability in Tsou.” 70th annual meeting of the Linguistic Society of America. San Diego, CA, January 1996.
- 1995 Bell, T. S. and R. Wright “Differential masking of individual words within a sentence.” 129th Meeting of the Acoustical Society of America, Washington, D.C., May, 1995.
- 1995 R. Wright, and I. Maddieson “Variability in a three vowel system: Amis.” Austronesian Formal Linguistics Association. Los Angeles, CA, March 1995.
- 1994 R. Wright. “Coda lenition in American English consonants: an EPG study.” 127th Meeting of the Acoustical Society of America. MIT, Cambridge, MA, June 1994.
- 1994 P. Keating and R. Wright. “Effects of position-in-syllable on consonant articulations and acoustics.” 127th Meeting of the Acoustical Society of America. MIT, Cambridge, MA, June 1994.
- 1993 R. Wright. “Trading relations: Discrete versus continuous perception”. 125th Meeting of the Acoustical Society of America, Ottawa, Canada, May 1993.
- 1992 T. S. Bell, R. Wilson, R. Wright, and T. Stabinsky “A new recognition test using sentence materials; I. Psychometric functions.” American Academy of Audiology. Phoenix, Arizona. April 1992.
- 1992 R. Wright, and A. Shryock “Consonantal effects on F0 in SiSwati.” 123rd Meeting of the Acoustical Society of America. Salt Lake City, UT, May 1992.
- 1992 K. Johnson, R. Wright and E. Flemming “Perceptual vowel space in American English.” 123rd Meeting of the Acoustical Society of America. Salt Lake City, UT, May 1992.
- 1992 R. Wright and A. Shryock “The effects of implosives on fundamental frequency in SiSwati.” 23rd Annual Conference on African Linguistics. East Lansing, MI, March 1992.

Reviewer

Journals: *Canadian Journal of Linguistics, Cognition, Ear and Hearing, Journal of the Acoustical Society of America, Journal of the International Phonetic Association, Journal of Phonetics, Journal of Speech Language and Hearing Research, Labphon, Language, Language and Linguistics, Natural Language and Linguistic Theory, Phonetica, Phonology, Psychological Science, Speech Communication*

Conferences: Austronesian Formal Linguistics Association, International Conference on Austronesian Linguistics, International Congress of Phonetic Sciences, Laboratory Phonology, Linguistic Society of America North East Linguistics Society, West Coast Conference on Formal Linguistics, Western Conference on Linguistics

Grant Agencies – ad hoc reviewer for: National Institutes of Health, UW Royalty Research Fund, National Science Foundation, Social Sciences and Humanities Research Council of Canada,

On the editorial board: *Phonology*

Service at the University of Washington

Departmental

- *Phonetics lab director*
The Phonetics Laboratory, <http://depts.washington.edu/phonlab/>, is a research (grant funded and unfunded) and teaching resource used by faculty (5), graduate students (between 10-18 depending on the year) and undergraduate students from Linguistics and other departments (currently Asian Languages, Speech and Hearing Sciences, Psychology, Electrical Engineering). Research includes acoustic, physiological and perceptual research on spoken language and basic transcriptional research on signed language. The laboratory is run as a departmental resource for faculty and students, and as a teaching resource for a variety of courses: L432, L434, L446, L450, L453, and a variety of seminars in phonetics, phonology, language acquisition and sociolinguistics. The lab also supports independent study, and honors thesis research for undergraduate linguistics majors. Since 1998 the Phonetics Lab has supported grant-funded research (totaling **) in Linguistics, Speech and Hearing Sciences, and Electrical Engineering.
- *Department of Linguistics ad hoc committee on resources, 2011, 2012*
- *Department of Linguistics ad hoc committee on curriculum, 2011, 2012*
- *Department of Linguistics tenure committee for Emily Bender, 2009*
- *Hiring committee for permanent position in computational linguistics 2010*
- *Conference organizer (with Fritz Newmeyer), Department of Linguistics: WCCFL 2006*
- *Hiring committee for three positions in computational linguistics 2004*
- *Department of Linguistics computational linguistics committee (to develop collaboration across disciplines in computational linguistics within the university) 2001-2002*
- *Conference organizer, Department of Linguistics: WECOL 2001*
- *Department of Linguistics admissions committee 1998, 2000, 2001, 2003, 2005, 2008, 2011*

University of Washington

- *University of Washington Faculty Senate, Arts & Sciences 2011-2013*
- *Graduate School Standing Committee on Research (FCR) 2005-2011*
- *UW RRF Arts Committee Fall 2009-Spring 2011*
- *University of Washington open access working group (FCR rep.) 2009-2010*
- *FCR subcommittee on interdisciplinary research 2007*
- *FCR subcommittee on faculty effort reporting 2006-2011*
- *Internal member, University of Washington Graduate School review committee for the Division of French and Italian Studies 2006*
- *Graduate School Standing Committee on Academic Grievance 2003*

Service outside the University of Washington

- Technical Committee organizer of the *Speech Communication* sessions of the 161st Meeting of the Acoustical Society of America (225 total presentations), 23-27 May, 2011.
- Cyberling panel on “Annotation standards: Existing and needed”, Cyberling 2009: Towards a Cyberinfrastructure for Linguistics, Berkeley, CA, July 2009. Panel written report: <http://cyberling.elanguage.net/page/Working+Groups>

Chair of the Ph.D. committee:

Valerie Freeman

Research interests: Discourse and stance effects in spoken language, experimental sociophonetics

Daniel McCloy

Research interests: speech perception, computational linguistics, endangered language documentation

Steven Moran, Linguistics (Co-Chair with Emily Bender, Linguistics)

Computational typology (*Phonetics Information Base and Lexicon: PhOIBLe*)

Kelley Kilanski, Linguistics PhD 2009

Title: *The Effects of Token Frequency and Phonological Neighborhood Density on Speech Production for Native and Non-Native Speakers of English*

Lesley Carmichael, Linguistics, PhD 2005

Title: *Situation-Based Intonation Pattern Distribution in a Corpus of American English*

Setsuko Shirai, Linguistics, PhD 2005

Title: *Lexical effects in Japanese vowel reduction*

Gabriel Webster, Linguistics, PhD 2002

Title: *Toward a psychologically and computationally adequate model of speech perception*

Soohee Kim, Linguistics, PhD 1999, (Co-chair with Sharon Hargus, Linguistics)

Title: *Sub-phonemic duration differences in English /s/ and few-to-many borrowing from English to Korean*

Member of the Ph.D. supervisory and reading committee:

Camilla Anderson, Speech and Hearing Sciences, PhD 2003 (Chair, Margaret Rogers)

Rebecca Bates, Electrical Engineering, PhD 2004 (Chair, Mari Ostendorf)

Stephanie Bor, Speech and Hearing Sciences, PhD 2009 (Chair, Pamela Souza)

Alexis Bossler, Speech and Hearing Sciences (Patricia Kuhl)

Sarah Churng, Linguistics (Chair, Barbara Citko)

Emily Curtis, Linguistics, PhD 2004 (Chair, Sharon Hargus)

Manuel Da Conceicao, Linguistics, PhD 2007 (Chair, Jurgen Klausenberger)

Evelyn Davies-Venn, Speech and Hearing Sciences, PhD 2010 (Chair, Christopher Steker)

Lendra M. Friesen, Speech and Hearing Sciences, PhD 2007 (Chair, Kelly Tremblay)

Wendy Kempself Jacinto, Linguistics (Alicia Beckford Wassink)
Susannah Levi, Linguistics PhD 2004 (Chair, Ellen Kaisse)
Kening Li, Linguistics PhD 2009 (Chair, Ellen Kaisse)
Jo-Fu Lotus Lin, Speech and Hearing Sciences, PhD 2009 (Chair, Patricia Kuhl)
Jonathan Malkin, Electrical Engineering PhD 2009 (Chair, Jeff Bilmes)
Kate McClannahan, Speech and Hearing Sciences (Chair, Kelly Tremblay)
Julia Colleen Miller, Linguistics (Chair, Sharon Hargus)
Meghan Oxley, Linguistics (Alicia Beckford Wassink)
Beate Peters, Speech and Hearing Sciences, PhD 2007 (Chair, Carol Stoel-Gammon)
Jessica Pruitt, Speech and Hearing Sciences (Chair, Patricia Kuhl)
Ioulia Galperina-Radu, Linguistics (Barbara Citko)
John Riebold, Linguistics (Alicia Beckford Wassink)
Kevin Reilly, Speech and Hearing Sciences, PhD 2003 (Chair, Christopher Moore)
Lorna Rozelle, Linguistics, PhD 2003 (Chair, Sharon Hargus, Linguistics)
Izhak Shafran, Electrical Engineering, PhD 2001 (Chair, Mari Ostendorf)
Michael Scanlon, Linguistics (Alicia Beckford Wassink)
Amy Skinder, Speech and Hearing Sciences, PhD 2001 (Chair, Carol Stoel-Gammon)
Jo Ann Silkes, Speech and Hearing Sciences, PhD 2010 (Chair, Kristie Spencer)
Robert Sykes, Linguistics (Alicia Beckford Wassink)
Lakshmi Venkatesh, Speech and Hearing Sciences, PhD 2008 (Chair, Christopher Moore)
Yungdo Yun, Linguistics, PhD 2004 (Chair, Ellen Kaisse)
Krisztina Zajdo, Speech and Hearing Sciences, PhD 2002 (Chair, Carol Stoel-Gammon)
Christina Tian Zhao, Speech and Hearing Sciences (Chair, Patricia Kuhl)

GSR member of the Ph.D. committee

Richard F. Buxton, Classics, PhD 2010 (Chair, Deborah Kamen) GSR
Charles Pascal Clark, Electrical Engineering (Chair, Les Atlas) GSR
Sun Mi Kim, Asian Languages and Literature, (Chair, Zev Handel) GSR
Lin Deng, Asian Languages and Literature, PhD 2011 (Chair, Anne Yue-Hashimoto) GSR
Hakon Leifsson, Music, PhD 2004 (Chair, Abraham Kaplan) GSR
Michael Solomon Horowitz, Music (Chair, Philip Schuyler) GSR
Peter Yoachim, Astrophysics, PhD 2007 (Chair, Julianne Delcanton) GSR

External member of the Ph.D. committee

Teresa Vanderweide, U of Calgary Dept. of Linguistics, PhD 2005, (Chair, John Archibald)

Chair of the M.A. committee:

Misty Azara, Linguistics, MA 2002

Title: *The role of the pitch accent in discourse.*

Haewon Cho Linguistics, MA 2005

Title: *Intonation transfer in second language acquisition: An analysis of English intonation by Korean speakers.*

Valerie Freeman, Linguistics, MA 2010

Title: *Using acoustic measures of hyperarticulation to quantify novelty and evaluation in a corpus of political talk shows*

Jessica Giesler, Linguistics, MA 2003

Title: *A conflicting-cue study examining the relative strengths of consonant transition cues as affected by vowel, noise and position.*

Jennifer Haywood, Linguistics

Interests: Speech perception, talker intelligibility, vowel space normalization, the phonetics of L2 accent

Daniel Jinguji, Linguistics

Interests: The phonetics of Arabic emphatics

Jineoun Kwan, Linguistics, MA 2005

Title: *Effects of oral-nasal consonantal contexts on perception of English vowel contrasts by Korean listeners.*

David Montero, Linguistics, MA 2007

Title: *The perception of the acoustic correlates of stress: A cross-linguistic study on English, French and Spanish*

Melissa Preston, Linguistics, MA 2002

Title: *An acoustic study of Turkish vowel harmony.*

Miriam Stone-Garcia, Linguistics, MA 2005

Title: *Hemispheric lateralization for linguistic intonation: A dichotic listening study.*

MA member of the reading committee:

Jamie Andrus, Linguistics, MA 2011 (Chair, Alicia Beckford Wassink)

Maria Burgess, Linguistics MA 2010 (Chair, Betsy Evans)

Zachary Bohnenkamp, Linguistics, MA 2001 (Chair, Alicia Beckford Wassink)

Lesley Carmichael, Linguistics MA 2000 (Chair, Julia Herschensohn)

Ryan J. Conley, Speech and Hearing Sciences MS 2002 (Chair: Patricia Kuhl)

Emily K. J. Curtis, Linguistics MA 2000 (Chair, Sharon Hargus)

Lisa Galvin, Linguistics MA 2004 (Chair, Alicia Beckford Wassink)

Noah Girgis, Linguistics MA 2009 (Chair, Alicia Beckford Wassink)
Derek Gulas, Linguistics MA 2008 (Chair, Charles Barrack)
Joshua Ho, Linguistics CLMS 2010 (Chair, Emily Bender)
Wendy Kempfeller Jacinto, Linguistics MA 2010 (Alicia Beckford Wassink)
Jeremy Kahn, Linguistics MA (Chair, Mari Ostendorf)
Susannah Levi, Linguistics MA 2000 (Chair, Ellen Kaisse)
Kening Li, Linguistics MA 2002 (Chair, Ellen Kaisse)
Jo Fu Lin, Speech and Hearing Sciences MS 2006 (Chair, Patricia Kuhl)
Jeremy Munson, Linguistics MA 2002 (Chair, Alicia Beckford Wassink)
Meghan Oxley, Linguistics MA 2009 (Chair, Alicia Beckford Wassink)
Star Sinclair Reed, Speech and Hearing Sciences MS 2009 (Chair, Pamela Souza)
Neeru Rohila Speech and Hearing Sciences MS 2005 (Chair, Kelly Tremblay)
Michael Scanlon, Linguistics MA 2007 (Chair, Alicia Beckford Wassink)
Setsuko Shirai, Linguistics MA 1999 (Chair, Ellen Kaisse)
Eugene Spindler, Speech and Hearing Sciences (Chair, Julie Bierer)
Sylwia Tur, Linguistics MA 2003 (Chair, Sharon Hargus)
Chih-Chi Wen, Linguistics MA 2003 (Chair, Alicia Beckford Wassink)
Kerry Witherell, Speech and Hearing Sciences MS 2007 (Chair, Pamela Souza)
Scott Yribar, Linguistics MA 2005 (Chair, Alicia Beckford Wassink)
Li Yi Zhu, Linguistics MA 2012 (Chair Betsy Evans)

Courses Taught at UW

LING 200 (Introduction to Linguistics: undergraduates)
LING 450/550 (Introduction to Linguistic Phonetics: graduates and undergraduates)
LING 451 (Introduction to Phonology: graduates and undergraduates)
LING 453/553 (Phonology III: Experimental Phonetics and Phonology: graduates and undergraduates)
LING 480A (Experimental Phonetics)
LING 499 (undergraduate directed research)
LING 554/580 Graduate Seminar
 1998 “Perception and Timing”
 1999 “Spoken Word Recognition”
 2002 “Phonetics of Intonation”
 2003 “Coarticulation”
 2004 “Perception and Sound Change”
 2005 “Category Internal Structure in Perception”

2006 “Episodic models and perceptual speech category learning”
2007 “Consonants and prosodic edge effects”
2008 “Vowel perception and salience”
2009 “Perceptual cues, syllable structure, and JNDs” joint seminar taught with
Ellen Kaisse and Alicia Beckford Wassink
2012 “The phonetics and phonology of intonation” joint seminar taught with Ellen
Kaisse.

LING 600 (Graduate Independent Study)

LING 700 (MA Thesis Supervision)

LING 800 (Doctoral Dissertation Supervision)

Psy 660/Ling 554 Year long joint graduate seminar on the neural instantiation of language
taught with Prof. Lee Osterhaut and Prof. David Corina of psychology in 2001

Honors, Awards

1996 UCLA Dissertation fellowship
Visiting Scholar, Academia Sinica Dept. of History and Philology, Taipei, Taiwan
1990-94 Jacob Javits Fellowship in the Humanities
1986 Phi Kappa Phi
1986 Phi Sigma Iota
1985 Fulbright Hayes fellowship: intensive Swahili study in Kenya
1984 Department of Education Title IV language fellowship: Swahili
1981-86 National Merit Scholar