Curriculum Vitae

Elin Roverud

Education

Purdue University 2014
Ph.D. Hearing Science

Purdue University 2011
Au.D.

University of Minnesota 2007
B.A.

Certification

ASHA Certificate of Clinical Competence in Audiology 2013-present

Research and Professional Experience

Psychoacoustics Laboratory, Boston University 2017-present
Research Assistant Professor

Psychoacoustics Laboratory, Boston University 2014-2017
Postdoctoral Research Scientist

Psychoacoustics Laboratory, Purdue University 2008-2014
Research Assistant

Psychoacoustics/Speech Perception Laboratory, University of Minnesota 2006-2007
Undergraduate Research Assistant

Research Interests

Perceptual training and auditory learning in listeners with hearing loss
Selective auditory attention in listeners with normal hearing and hearing loss
Hearing loss-induced changes in the processing of complex sounds
Linking objective measures of auditory function to auditory perception

Publications

Peer-Reviewed Articles

Roverud, E. and Best, V. (2024). "Effect of hearing aids on the externalization of everyday sounds," JASA Express Letters, 4 (9).

Best, V. and **Roverud, E.** (2024). "Externalization of speech when listening with hearing aids," Trends in Hearing, 28.

Roverud, E., Villard, Sarah, and Kidd, G., Jr. (2023). "Strength of target source segregation cues affects the outcome of speech-on-speech masking experiments," J. Acoust. Soc., 153, 2780.

Roverud, E., Dubno, J.R., Richards, V.M., and Kidd, G., Jr. (2021). "Cross-frequency weights in normal and impaired hearing: Stimulus factors, stimulus dimensions, and associations with speech recognition," J. Acoust. Soc. Am., 150, 2327-2349.

Roverud, E., Dubno, J.R., and Kidd, G., Jr. (2020). "Hearing-impaired listeners show reduced attention to high-frequency information in the presence of low-frequency information," Trends in Hearing, 24, 1-17.

Roverud, E., Bradlow, A., and Kidd, G., Jr. (2020). "Examining the sentence superiority effect for sentences presented and reported in forwards or backwards order," Applied Psycholinguistics, 41, 381-400.

Best, V., **Roverud., E.**, Baltzell, L., Rennies, J., and Lavandier, M. (2019). "The importance of a broad bandwidth for understanding "glimpsed" speech," J. Acoust. Soc. Am., 145, 3215-3221.

Rennies, J., Best, V., **Roverud, E.**, and Kidd, Jr., G. (2019). "Energetic and informational components of speech-on-speech masking in binaural speech intelligibility and perceived listening effort," Trends in Hearing, 23, 1-21.

Kidd, G., Jr., Mason, C.R., Best, V., **Roverud, E.**, Swaminathan, J., Jennings, T., and Clayton, K. (2019). "Determining the energetic masking and informational components of speech-on-speech masking in listeners with sensorineural hearing loss," J. Acoust. Soc. Am. 145, 440-457.

Best, V., Swaminathan, J., Kopco, N., **Roverud, E.**, and Shinn-Cunningham, B. (2018). "A "Buildup" of speech intelligibility in listeners with normal hearing and hearing loss," Trends in Hearing, 22, 1-11.

Best, V., Ahlstrom, J.B., Mason, C.R., **Roverud, E.**, Perrachione, T.K., Kidd, G., Jr., Dubno, J.R. (2018). "Talker identification: Effects of masking, hearing loss, and age," J. Acoust. Soc. Am. 143, 1085-1092.

Roverud, E., Best, V., Mason, C.R., Streeter, T., and Kidd, G., Jr. (2017). "Evaluating the performance of a visually guided hearing aid using a dynamic audio-visual word congruence task," Ear & Hearing, 39(4), 756-769.

Best, V., **Roverud, E.**, Mason, C.R., and Kidd, G., Jr. (2017). "Examination of a hybrid beamformer that preserves auditory spatial cues," J. Acoust. Soc. Am. 142: EL369.

Best, V., **Roverud, E.**, Streeter, T., Mason, C.R., and Kidd, G., Jr. (2017). "The benefit of a visually guided beamformer in a dynamic speech task," Trends in Hearing, 20, doi: 10.1177/2331216517722304.

Best, V., Mason, C.R., Swaminathan, J., **Roverud, E.**, and Kidd, G., Jr. (2017). "Use of a glimpsing model to understand the performance of listeners with and without hearing loss in spatialized speech mixtures," J. Acoust. Soc. Am. 141, 81-91.

Best, V., Streeter, T., **Roverud, E.**, Mason, C., Kidd, G., Jr. (2016). "A flexible question-and-answer task for measuring speech understanding," Trends in Hearing, 20, doi:10.1177/2331216516678706.

Swaminathan, J., Mason, C., Streeter, T., Best, V., **Roverud. E.**, and Kidd, G., Jr. (2016). "Role of binaural temporal fine structure and envelope cues in cocktail-party listening," J. Neuroscience. 36(31), 8250-8257.

Kidd, G., Jr., Mason, C.R., Swaminathan, J., **Roverud, E.**, Clayton, K., and Best, V. (2016). "Determining the energetic and informational components of speech-on-speech masking," J. Acoust. Soc. Am. 140(1), 132-144.

Roverud, E., Best, V., Mason, C., Swaminathan, J., and Kidd, G., Jr. (2016). "Informational masking in normal-hearing and hearing-impaired listeners measured in a nonspeech pattern identification task," Trends in Hearing, 20, 1-17.

Roverud, E., and Strickland, E.A. (2015). "The effects of ipsilateral, contralateral, and bilateral broadband noise on the mid-level hump in intensity discrimination," J. Acoust. Soc. Am., 138(5), 3245-3261.

Roverud, E., and Strickland, E.A. (2015). "Exploring the source of the mid-level hump for intensity discrimination in quiet and the effects of noise," J. Acoust. Soc. Am., 137(3), 1318-1335.

Roverud, E., and Strickland, E.A. (2014). "Accounting for nonmonotonic precursor duration effects with gain reduction in the temporal window model," J. Acoust. Soc. Am., 135(3), 1321-1334.

Roverud, E., and Strickland, E.A. (2010). "The time course of cochlear gain reduction measured using a more efficient psychophysical technique," J. Acoust. Soc. Am., 128, 1203-1214.

<u>Book Chapters and Conference Proceedings</u>

Roverud, E., Best, V., Mason, C.R., and Kidd, G., Jr. (2015). "Selective and divided listening in normal-hearing and hearing-impaired listeners measured in a nonspeech pattern identification task," *Proceedings of Meetings on Acoustics Vol. 23, 050002*.

Roverud, E., and Strickland, E.A. (2013). "Modeling psychophysical gain reduction effects as a function of precursor duration," *Proceedings of Meetings on Acoustics Vol. 19, 050093.*

Roverud, E.M., and Strickland, E.A. (2013). "Modeling effects of precursor duration on behavioral estimates of cochlear gain," *In B.C.J. Moore, R.D. Patterson, I.M. Winter, R.P. Carlyon, H.E. Gockel (Eds.), Basic Aspects of Hearing: Physiology and Perception, Springer, New York, pp. 55-63.*

Presentations

Conference Talks

Roverud, E. (2018). "Examining the relative influence of word recognition and word recall on speech recognition in speech mixtures," *Association for Research in Otolaryngology Conference* (San Diego, California).

Roverud, E., Best, V., Mason, C., Streeter, T., and Kidd, G., Jr. (2016). "Evaluating performance of hearing-impaired listeners with a visually-guided hearing aid in an audio-visual word congruence task," *Acoustical Society of America Conference* (Salt Lake City, Utah)

Roverud, E., and Strickland, E.A. (2015). "Predicting forward masking data with olivocochlear efferent effects in the temporal window model," *Association for Research in Otolaryngology Conference* (Baltimore, Maryland)

Roverud, E., and Strickland, E.A. (2012). "Modeling effects of precursor duration on behavioral estimates of cochlear gain," *The 16th International Symposium on Hearing* (Cambridge, United Kingdom).

Roverud, E., and Strickland, E.A. (2011). "Parametric issues in measuring gain reduction with a masking technique," *Acoustical Society of America Conference* (San Diego, California).

Poster Presentations

Roverud, E., Dubno, J.R., Kidd, G., Jr. (2020). "Cross-frequency weights for loudness, pitch, and duration and their relation to speech recognition in normal-hearing and hearing-impaired listeners," *Acoustical Society of America* (virtual).

Roverud, E., Best, V., Conroy, C., Kidd, G., Jr. (2018). "The effect of masker type and masker timing on the serial recall of speech," *Acoustical Society of America* (Minneapolis, Minnesota).

Roverud, E., Best, V., Dubno, J.R., Mason, C.R., Kidd, G., Jr. (2017). "Does hearing loss affect the use of information at different frequencies? Results from a simultaneous tonal pattern discrimination task in normal-hearing and hearing-impaired listeners," *Acoustical Society of America* (Boston, Massachusetts).

Roverud, E., Best, V., Mason, C.R., Kidd, G., Jr. (2017). "The influence of word sequence length and source segregation on serial recall of masked speech," *Association for Research in Otolaryngology* (Baltimore, Maryland).

Roverud, E., Best, V., Mason, C., Streeter, T., and Kidd, G., Jr. (2016). "Evaluating the efficacy of a visually-guided hearing aid using a dynamic audio-visual congruence task," *Association for Research in Otolaryngology* (San Diego, California).

Roverud, E., Best, V., Mason, C.R., and Kidd, G.K., Jr. (2015). "Analytic and divided listening in normal-hearing and hearing-impaired listeners measured in a nonspeech pattern identification task," *Acoustical Society of America* (Pittsburgh, Pennsylvania).

Roverud, E., and Strickland, E.A. (2014). "Examining the influence of forward, backward, and simultaneous notched noise on the mid-level hump in intensity discrimination," *Acoustical Society of America* (Providence, Rhode Island).

Roverud, E., and Strickland, E.A. (2014). "The effects of ipsilateral and contralateral noise on the 'mid-level hump' in intensity discrimination," *Association for Research in Otolaryngology Conference* (San Diego, California).

Roverud, E., and Strickland, E.A. (2013). "Modeling psychophysical gain reduction effects as a function of precursor duration," *Acoustical Society of America Conference* (Montreal, Quebec).

Roverud, E., and Strickland, E.A. (2010). "The time course of the temporal effect and its relationship to an efferent mechanism," *Association for Research in Otolaryngology Conference* (Anaheim, California).

Roverud, E., and Strickland, E.A. (2009). "The effect of precursor duration and delay on behavioral estimates of cochlear gain," *Association for Research in Otolaryngology Conference* (Baltimore, Maryland).

Roverud, E., and Schlauch, R. (2006). "Informational Masking and Loudness," *Acoustical Society of America Conference* (Minneapolis, Minnesota).

Research Grants

Completed

"Weighting of auditory information," (**E. Roverud**, PI), National Institutes on Deafness and Other Communication Disorders – K01 DC016627.

Pending

"Transcranial stimulation combined with auditory training," (**E. Roverud**, PI), National Institutes on Deafness and Other Communication Disorders – R21 DC021763.

Honors and

Association for Research in Otolaryngology Graduate Student Travel Award 2014

Awards

Purdue Research Foundation Fellowship	2013-2014
Frances P. Wilson Graduate Scholarship	2013, 2014
NIH Pre-doctoral Training Grant Fellowship	2012-2013
Frances P. Wilson Graduate Scholarship	2010
Audiology Foundation of America Outstanding Student Award nominee	2008
Wilson Recruitment Scholarship	2007
Selmer Birkelo Scholarship	2006

Teaching Experience

CA 722, Auditory Perception and Psychoacoustics — Fall, 2023 and 2024
Massachusetts General Hospital Institute of Health Professions
(Primary Instructor)

CAH 810, Research Methods and Quality Improvements — Summer, 2024
Massachusetts General Hospital Institute of Health Professions
(Primary Instructor)

SH 700, Research Methods in Speech-Language Pathology and Audiology, Boston University — Fall, 2021
(Primary Instructor)

SH 810, Graduate Seminar on Grant Preparation, Boston University — Spring, 2018
(Guest lecturer on preparing K award application)

SLHS 503, Auditory Perception, Purdue University — Fall, 2012
(Primary Instructor)

SLHS 304, Anatomy and Physiology of the Speech and Hearing Mechanism, Purdue University — Fall, 2011
(Guest lecturer for three lectures on hearing)

SLHS 302, Acoustic Bases of Speech and Hearing, Purdue University — Spring, 2008
(Laboratory Instructor)

SLHS 304, Anatomy and Physiology of the Speech and Hearing Mechanism, Purdue University — Fall, 2007
(Laboratory Instructor)

Clinical Experience

Indiana University School of Medicine, Indianapolis, IN — 2010-2011
Audiology Extern
Performed diagnostic hearing and vestibular assessment, hearing aid fitting and adjustment, and cochlear implant mapping and programming for patients across the life span (infancy to adulthood).

Northeast Otolaryngology, Kokomo/Noblesville, IN — 2010
Audiology Extern

Performed diagnostic hearing assessment, and hearing aid fitting and programming.

Clarian-Arnett Hospital, Lafayette, IN 2009
Audiology Extern
Performed diagnostic hearing assessment, and hearing aid fitting and programming.

Purdue University Audiology Clinic 2007-2009
Audiology Intern
Performed diagnostic hearing assessment for patients across the lifespan, occupational safety and health screenings for employees at Purdue University, hearing aid fitting and adjustment, auditory training and counseling.

Professional Affiliations

Acoustical Society of America	Member 2011-present
American Speech-Language-Hearing Association	Member 2013-present
Association for Research in Otolaryngology	Member 2013-present

Leadership Positions

Acoustical Society of America Technical Committee 2017-2021
Psychological and Physiological Acoustics technical committee

Acoustical Society of America Student Council 2011-2013
Representative for Psychological and Physiological Acoustics technical committee
Duties included attending biannual ASA meetings, attending student and technical committee meetings, serving as a liaison between students and faculty, and fostering and encouraging student involvement in the society. Extra duties included constructing the student information bulletin board, and serving on the mentor award selection committee.

Service

Editorial Board Member – Journal of Speech, Language, Hearing Research	2020-present
Journal Reviewer – International Journal of Audiology	2019
Journal Reviewer – Trends in Hearing	2019
Journal Reviewer – J. Acoustical Society of America	2016-present
Journal Reviewer – Ear and Hearing	2016-present
Consulting Journal Reviewer – J. Neuroscience	2015

Other Skills

Languages: English (native), American Sign Language (some proficiency), French (some proficiency)
Experienced with Matlab coding