

KATHY R. VANDER WERFF, PhD

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EDUCATION

PhD, Speech and Hearing Science, **University of Iowa**, Iowa City 1998-2002
Advisor: Carolyn J. Brown, PhD
Dissertation: Threshold and supra-threshold responses of the auditory steady-state response

MA, Audiology, **University of Iowa**, Iowa City, IA 1991-1993

BA, Communication Disorders, **Northeast Missouri State University**, Kirksville, MO 1987-1991

PROFESSIONAL POSITIONS

Associate Chair, Communication Sciences and Disorders, **Syracuse University**, Syracuse, NY 2012, 2014-present

Faculty Affiliate, Aging Studies Institute, **Syracuse University**, Syracuse, NY 2013-present

Associate Professor, Communication Sciences and Disorders, **Syracuse University**, Syracuse, NY 2010-present

Research Faculty, Department of Physical Medicine and Rehabilitation, **SUNY Upstate Medical University**, Syracuse, NY (Voluntary Faculty Appointment) 2010-present

Assistant Professor, Communication Sciences and Disorders, **Syracuse University**, Syracuse, NY 2004-2010

Post-doctoral Research Associate, Communication Sciences and Disorders, **Syracuse University**, Syracuse, NY 2003-2004

Graduate Teaching Assistant, Department of Speech Pathology and Audiology, **University of Iowa**, Iowa City, IA 2000-2002

Graduate Research Assistant, Department of Otolaryngology, Head and Neck Surgery, **University of Iowa Hospitals and Clinics**, Iowa City, IA and Department of Speech Pathology and Audiology, **University of Iowa**, Iowa City, IA 1999-2002

Clinical Supervisor, Department of Speech Pathology and Audiology, **University of Iowa**, Iowa City, IA 1998-1999

Research and Clinical Audiologist, **Veteran's Administration Medical Center**, Iowa City, IA 1995-1998

Clinical Audiologist, Division of Adult Audiology, **Washington University School of Medicine**, St. Louis, MO 1994-1995

Audiology Clinical Fellow, **Pacific Hearing Service**, Atherton, CA 1993-1994

GRANTS AND AWARDS

- **ERP Boot Camp Scholarship (NIH-funded workshop)**

Competitive scholarship award to attend a 10-day summer workshop at UC Davis on Event-Related Potential methodology and research applications.

2015
- **Cross-Sector Opportunity Grant, SU ADVANCE**

Award to female STEM faculty to promote interdisciplinary, cross-sector (academia-industry-community) research, \$4000

2012
- **Marvin and Carol Schneller Fund (Syracuse University)**

“A neurophysiological index of speech understanding in background noise: Informational masking and SNR effects.”

Role: Principal Investigator, Total Direct Costs: \$13,000

2011-2012
- **National Institute on Deafness and Other Communication Disorders (NIH/NIDCD)**

R03 NIH Small Grant Program

R03DC010246 “Neural responses to speech in the central auditory system following brain injury.”

Role: Principal Investigator, Total Direct Costs: \$300,000

2010-2013
- **American Academy of Audiology Foundation**

New Investigator Grant, “Time and Accuracy of ASSR Response Identification Using Two Different Analysis Methods.”

Role: Principal Investigator, Total Direct Costs: \$10,000

2005-2006
- **Marvin and Carol Schneller Fund (Syracuse University)**

“Estimating hearing thresholds using Auditory Steady-State Responses: Evaluating a new analysis method and threshold search procedure.”

Role: Principal Investigator, Total Direct Costs: \$5,000

2005-2006
- **American Speech-Language-Hearing Association**

Advancing Academic-Research Career (AARC) Award Recipient, \$5000

2006
- **Deafness Research Foundation Fellowship Award**

Travel award to attend Second Annual Clinical Research Conference

2004

PUBLICATIONS

*denotes mentored student co-author

Peer-reviewed Articles:

- **Vander Werff, K.R.** & Rieger, B. (submitted). Brainstem evoked potential indices of subcortical auditory processing following mild traumatic brain injury. *Ear and Hearing*.
- **Vander Werff, K.R.** & *Nesbitt, K.L. (submitted). Hearing loss and age induced changes in the central auditory system measured by the P3 response to small changes in frequency. *Journal of the American Academy of Audiology*.
- Prieve, B.A., **Vander Werff, K.R.**, Preston, J.L. & Georgantas, L. (2013). Identification of Conductive Hearing Loss in Young Infants Using Tympanometry and Wideband Reflectance. *Ear and Hearing*, 34(2), 168-78.
- **Vander Werff, K.R.** & *Burns, K.S. (2011). Brainstem responses to speech in younger and older adults. *Ear and Hearing*, 32(2), 168-180.
- **Vander Werff, K.R.** (2009). Accuracy and time efficiency of two ASSR analysis methods using clinical test protocols. *Journal of the American Academy of Audiology*, 20(7), 433-452.
- **Vander Werff, K.R.**, Prieve, B.A., & Georgantas, L.M. (2009). Air- and bone-conducted tone burst auditory brainstem responses for classification of hearing loss and the relationship to behavioral threshold. *Ear and Hearing*, 30(3), 350-368.

- **Vander Werff, K.R.**, Prieve, B.A., & Georgantas, L.M. (2007). Test-retest reliability of wideband reflectance measures in infants under screening and diagnostic test conditions. *Ear and Hearing*, 28(5), 669-681.
- **Vander Werff, K.R.**, & Brown, C.J. (2005). The effect of audiometric configuration on threshold and suprathreshold auditory steady-state responses. *Ear and Hearing*, 26(3), 310-326.
- Jeng F.C., Brown C.J., Johnson T.A., & **Vander Werff, K.R.** (2004). Estimating air-bone gaps using auditory steady-state responses. *Journal of the American Academy of Audiology*, 15(1), 67-78.
- **Vander Werff, K.R.**, Brown C.J., Gienapp B.A., & Schmidt Clay K.M. (2002). Comparison of Auditory steady-state response (ASSR) and auditory brainstem response (ABR) thresholds in children. *Journal of the American Academy of Audiology*, 13(5), 227-235.
- Hughes M.L., **Vander Werff, K.R.**, Brown C.J., Abbas, P.J., Kelsay, D.M.R., Teagle H.F.B., & Lowder, M.W. (2001). A longitudinal study of electrode impedance, EAP, and behavioral measures in Nucleus 24 cochlear implant users. *Ear and Hearing*, 22(6), 471-486.

Book Chapters and Invited Manuscripts:

- **Vander Werff, K.R.** (submitted). The application of ICF to auditory consequences of mild traumatic brain injury. *Seminars in Hearing*.
- **Vander Werff, K.R.** (2012). Auditory dysfunction among long-term consequences of mild traumatic brain injury (mTBI). *Perspectives on Hearing and Hearing Disorders: Research and Diagnostics*, 16(1), 3-17.
- **Vander Werff, K.R.**, Johnson, T.A., & Brown, C.J. (2008). Behavioral threshold estimation for auditory steady-state response. In: G. Rance (Ed.), *Auditory Steady-State Response: Generation, Recording, and Clinical Applications* (pp. 125-147). San Diego, CA: Plural.

PRESENTATIONS

*denotes mentored student co-author

- **Vander Werff, K.R.** & Rieger, B. (2014, May). Auditory evoked potentials and post-concussion auditory processing at subcortical and cortical levels. UNYTE: Promoting Upstate New York Collaborations in Neuroscience Research, Rochester, NY.
- **Vander Werff, K.R.** & Rieger, B. (2014, February). Post-concussion brainstem neural processing in quiet and noise. Poster presented at the 37th Annual Midwinter Research Meeting, Association for Research in Otolaryngology, San Diego, CA.
- *Cloutier, J.R., *Coscione, K.M., & **Vander Werff, K.R.** (2013, April). Neural encoding at the brainstem level following symptomatic concussion. Poster presented at the AudiologyNOW Annual Convention of the American Academy of Audiology of Audiology, Anaheim, CA. (*Winner of James Jerger Award for Excellence in Student Research*)
- *Coscione, K.M., *Cloutier, J.R., & **Vander Werff, K.R.** (2013, April). Effects of the number of talkers in speech noise on cortical auditory potentials. Poster presented at the AudiologyNOW Annual Convention of the American Academy of Audiology of Audiology, Anaheim, CA.
- **Vander Werff, K.R.**, *Coscione, K.M., & *Cloutier, J.R. (2013, March). Number of background talkers and informational masking effects on CAEP. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- **Vander Werff, K.R.** & Rieger, B. (2013, February). Cortical auditory processing in individuals with long-term symptoms following mild TBI. Poster presented at the 36th Annual Midwinter Research Meeting, Association for Research in Otolaryngology, Baltimore, MD.
- **Vander Werff, K.R.** & Rieger, B. (2012, July). Auditory outcomes for individuals in rehabilitation following mild TBI. Invited seminar at the National Center for Rehabilitative Auditory Research (NCRAR), Portland, OR.
- **Vander Werff, K.R.** & Rieger, B. (2012, April). Auditory outcomes for individuals in rehabilitation following mild TBI. Paper presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.

- *MacNeil, C. & **Vander Werff, K.R.** (2011, April). Monaural vs. Binaural Brainstem Responses to a Complex Speech Stimulus. Poster presented at the American Academy of Audiology Convention, Chicago, IL.
- **Vander Werff, K.R.** & *Arduini, S. (2011, March). Masker type and SNR effects on cortical responses to speech. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- **Vander Werff, K.R.** (2011, January). The BRANCHES study: Neural responses to speech following closed head injury. Presented at the Syracuse University continuing education seminar "Traumatic Brain Injury and its Effect on Speech, Language, and Hearing," Syracuse, NY.
- **Vander Werff, K.R.** (2009, June). Evoked potential measures of central auditory function following head injury. Paper presented at the XX Biennial Symposium of the International Evoked Response Audiometry Study Group, Rio de Janeiro, Brazil.
- *Burns, K.S., *Soll, A.C., & **Vander Werff, K.R.** (2009, March). Brainstem responses to speech in younger and older adults. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- **Vander Werff, K.R.** (2009, March). Evoked potential measures of central auditory function following head injury: preliminary data. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- *Nesbitt K.L., & **Vander Werff, K.R.** (2008, November). Cortical evoked potentials to frequency change in hearing impaired individuals: Evidence of cortical plasticity? Poster presented at the American Speech-Language-Hearing Association Convention, Chicago, IL.
- **Vander Werff, K.R.** (2007, April). ASSR analysis methods and the effect on clinical results. Paper presented at the American Academy of Audiology Convention, Denver, CO.
- Prieve B.A., **Vander Werff, K.R.**, & Georgantas L.M. (2006, April). TB-ABR, OAE & middle ear measures in sleeping infants. Poster presented at the American Academy of Audiology Convention, Minneapolis, MN.
- *Senior M.L., & **Vander Werff, K.R.** (2006, March). Comparison of clinical protocols and analysis methods for recording ASSR. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- **Vander Werff, K.R.**, Prieve B.A., & Georgantas L.M. (2005, March). Comparing middle ear measures to ABR air-bone threshold status in infants. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- **Vander Werff, K.R.**, & Prieve B.A. (2004, February). Test-retest reliability of wide-band reflectance measures in infants. Poster presented at the 27th Annual Midwinter Research Meeting, Association for Research in Otolaryngology, Daytona Beach, FL.
- Prieve B.A., Sterns A.R., **Vander Werff, K.R.**, & Woods S. (2004, February). Inferring olivocochlear efferent characteristics using protocols from across-species studies. Paper presented at the 27th Annual Midwinter Research Meeting, Association for Research in Otolaryngology, Daytona Beach, FL.
- **Vander Werff, K.R.**, & Brown C.J. (2003, February). ASSR threshold and response growth: Relationship to audiometric configuration. Poster presented at the 26th Annual Midwinter Research Meeting, Association for Research in Otolaryngology, Daytona Beach, FL.
- Brown C.J., **Vander Werff, K.R.**, Johnson T.A., & Schmidt Clay K.M. (2001, October). Serving Iowa's hearing-impaired infants and toddlers, screening through intervention: Using evoked potential techniques to estimate the audiogram. Invited presentation at the Iowa Speech and Hearing Association annual convention, Des Moines, IA.
- **Vander Werff, K.R.**, Brown C.J., Schmidt Clay K.M., & Gienapp B.A. (2001, July). Preliminary results using the ERA device to measure auditory steady-state response thresholds: Comparing ASSR and ABR thresholds in children. Poster presented at the XVIIth Biennial Symposium of the International Evoked Response Audiometry Study Group, University of British Columbia, Vancouver, B.C., Canada.
- Brown C.J., Johnson T.A., & **Vander Werff, K.R.** (2001, February). Using steady state auditory evoked potentials to assist with determination of cochlear implant candidacy: Initial results using the ERA Systems Ltd. device. Paper presented at the 8th Symposium on Cochlear Implants in Children, Los Angeles, CA.

- **Vander Werff, K.R.**, & Brown C.J. (2000, February). Changes over time in electrode impedance and EAP growth functions for adult Nucleus 24 cochlear implant users. Poster presented at the 6th International Cochlear Implant Conference, Miami, FL.
- Brown C., Abbas P., Hughes M., **Vander Werff, K.R.**, Gantz B., & Rubinstein J. (2000, February). Prediction of post-implant performance based on pre-implant promontory stimulation: Data from bilateral cochlear implant users. Poster presented at the 6th International Cochlear Implant Conference, Miami, FL.
- Brown C., Hughes M., **Vander Werff, K.R.**, Wahl B., Luk B., & Seyle, K. (2000, March). NRT: From Laboratory to Clinic. Paper presented at the 12th Annual Convention of the American Academy of Audiology, Chicago, IL.

CERTIFICATION, LICENSURE AND ACADEMIC MEMBERSHIPS

- New York State Audiology license
- Certificate of Clinical Competence in Audiology (CCC-A), American Speech-Language-Hearing Association
- American Speech-Language-Hearing Association Special Interest Division 6: Hearing and Hearing Disorders: Research and Diagnostics
- American Academy of Audiology
- American Auditory Society
- International Society of Audiology
- Association for Research in Otolaryngology