

CATHERINE C. RIEKE

EDUCATION

AuD Washington University in St. Louis School of Medicine May 2009
Doctorate in Audiology
Externship Year: Dartmouth-Hitchcock Medical Center

BS Saint Louis University May 2005
Summa Cum Laude
Communication Sciences and Disorders
Minors in English and Education

CLINICAL EXPERIENCE

Dartmouth Hitchcock Medical Center, Lebanon, NH 2009 to present
Clinical Audiologist, Department of Otolaryngology, Audiology and Maxillofacial Surgery
Instructor, Geisel Medical School at Dartmouth College

- Perform diagnostic audiologic, electrophysiologic and vestibular evaluations
- Supervise doctoral students in clinical training

Johnson Audiology, Hanover, NH 2018 to present
Partner and Clinical Audiologist

- Perform diagnostic audiologic evaluations and provide treatment of hearing loss through hearing aids and other assistive technology
- Provide Compensation and Pension evaluations for United States veterans

Dartmouth College, Lebanon, NH 2014 to present
Research Audiologist, Space Medicine Innovations Laboratory

- Analyze audiologic data related to auditory processing in HIV+ and HIV- populations in Dar es Salaam, Tanzania, Shanghai, China, and Washington DC
- Evaluate student athletes for concussion research as well as patients with neurocognitive disorders (e.g. Parkinson's, Alzheimer's, TBI). These studies involve performing and analyzing audiologic and auditory processing data.
- Measure cochlear changes via DPOAE mapping in normal hearing subjects, noise-exposed subjects, and patients receiving ototoxic treatment
- Provide professional consultation regarding the development of tablet-based hearing systems, which will provide access to hearing healthcare in underserved populations
- Train and oversee undergraduate and graduate students to perform hearing testing and data analysis

- Assist with protocol development and study design, as well as with writing and editing manuscripts

PUBLICATIONS

Bessen, S. Y., Magro, I. L., Alvarez, K. M., Cowan, D. R., Peñalba, D., Fellows, A., Gonzalez-Quiroz, M., Rieke, C. Buckey, J., Niemczak, C. & Saunders, J. E. (2022). Test-Retest repeatability of automated threshold audiometry in Nicaraguan schoolchildren. *International Journal of Audiology*, 1-8.

Niemczak CE, White-Schwoch T, Fellows A, et al. Peripheral Auditory Function in Young HIV-Positive Adults With Clinically Normal Hearing. *Otolaryngology–Head and Neck Surgery*. September 2021. doi:10.1177/01945998211047147

Niemczak, C.E., Lichtenstein, J.D., Magohe, A., Amato, J.T., Fellows, A.M., Gui, J., Huang, M., Rieke, C.C., Massawe, E.R., Boivin, M. and Moshi, N., 2021. The Relationship Between Central Auditory Tests and Neurocognitive Domains in Adults Living With HIV. *Frontiers in Neuroscience*, p.1277.

Chris A. Brooks, Odile H. Clavier, Abigail M. Fellows, Catherine C. Rieke, Christopher E. Niemczak, Jiang Gui, Nina J. Pryor, Hilary L. Gallagher, Sara A. Murphy, Sean R. Wise, Claire Healy-Leavitt, Lindsay V. Allen & Jay C. Buckey (2021) Distortion product otoacoustic mapping measured pre- and post-loud sound exposures, *International Journal of Audiology*, DOI: 10.1080/14992027.2021.1928303

Massawe ER, Moshi N, Ren J, Rieke CC, Magohe AK, Fellows AM, Arega EA, Niemczak CE, Jackson BP, Karagas MR, Buckey JC. Unexplained multi-sensory neuropathy syndrome in young Tanzanian adults. *J Glob Health Rep*. 2021;5:e2021013. doi: 10.29392/001c.21360. Epub 2021 Mar 30. PMID: 34084947; PMCID: PMC8171245.

White-Schwoch, T., Magohe, A. K., Fellows, A. M., Rieke, C. C., Vilarello, B., Nicol, T., Massawe, N.M, Kraus, N., & Buckey, J. C. (2020). Auditory neurophysiology reveals central nervous system dysfunction in HIV-infected individuals. *Clinical Neurophysiology*, 131(8), 1827-1832.

McEnany, F. B., Norris, J. A., Fellows, A. M., Clavier, O. H., Meinke, D. K., Rieke, C. C., ... & Buckey, J. C. (2020). Use of custom-moulded earmoulds to improve repeatability of DPOAE map measurements. *International Journal of Audiology*, 1-6.

Anderson, A. P., Covington, K. B., Rieke, C. C., Fellows, A. M., & Buckey, J. C. (2020). Detecting changes in distortion product otoacoustic emission maps using statistical parametric mapping and random field theory. *The Journal of the Acoustical Society of America*, 147(5), 3444-3453.

Magro, I., Clavier, O., Mojica, K., Rieke, C., Eisen, E., Fried, D., ... & Saunders, J. (2020). Reliability of Tablet-based Hearing Testing in Nicaraguan Schoolchildren: A Detailed Analysis. *Otology & Neurotology*, 41(3), 299-307.

Rieke CC, Clavier OH, Allen LV, Anderson AP, Brooks CA, Fellows AM, Brungart DS, Buckey JC. Fixed-Level Frequency Threshold Testing for Ototoxicity Monitoring. *Ear Hear.* 2017 Nov/Dec;38(6):e369-e375

**This paper was nominated for the 2017 Ear and Hearing Editors' Award*

Rieke CC, Fellows AM, Clavier OH, Allen LV, Brooks CA, Buckey JC. Repeatability of High-Frequency Békésy Audiometry for Ototoxicity Monitoring. Poster session presented at: AudiologyNOW 2th Annual Conference of the American Academy of Audiology; 2016 April 14; Phoenix, AZ.

Maro II, Fellows AM, Clavier OH, Gui J, Rieke CC, Wilbur JC, Chambers RD, Jastrzemski BG, Mascari JE, Bakari M, Matee M, Musiek FE, Waddell RD, von Reyn CF, Palumbo PE, Moshi N, Buckey JC. Auditory Impairments in HIV-Infected Children. *Ear Hear.* 2016

Rieke, C. C. (2008). Symptoms of imbalance associated with cervical spine pathology. Digital Commons. Washington University in St. Louis, School of Medicine.

PROFESSIONAL AFFILIATIONS

American Academy of Audiology
Academy Scholar, 2020 to present
Fellow, 2009 to present

American Board of Audiology
Board-certified audiologist, 2010 to present