

Daniel Guest, Ph.D.

✉ guest121@umn.edu 🐦 @drdrguest
🌐 <https://guestdaniel.github.io/>

Education

2017 – ... **Ph.D., University of Minnesota**, Psychology
2013 – 2017 **B.S., The University of Texas at Dallas**, Psychology

Research

University of Minnesota

2017 – ... 🔗 Auditory Perception and Cognition Lab (Andrew Oxenham)
2018 – ... 🔗 Computational Visual Neuroscience Lab (Kendrick Kay)

The University of Texas at Dallas

2015 – 2017 🔗 Speech Perception Lab (Peter Assmann)

Awards

National Institutes of Health

2020 – 2022 F31 Ruth L. Kirschstein Predoctoral Individual National Research Service Award
Title: *Processing of complex sounds at high frequencies*

University of Minnesota

2017 – 2022 College of Liberal Arts Graduate Fellowship
2018 – 2020 NSF-NRT Graduate Training Program in Sensory Science Fellowship
2018 Department of Psychology Graduate Summer Research Fellowship

National Science Foundation

2018 Graduate Research Fellowship Program, Honorable Mention

Professional experience

Oticon A/S

2019 Research intern in Augmented Hearing, Eriksholm Research Center
Supervisor: Lars Bramsløw

Teaching

University of Minnesota

2021 Guest lecturer, Osher Lifelong Learning Institute Course “Normal and Abnormal Perception: How Senses Shape Experience”
Lecture topic: *The science of hearing loss*
2018 – 2019 Guest lecturer, Introduction to Biological Psychology (PSY 3061)
Lecture topic: *Audition*

Publications and presentations

Journal Articles

Kapolowicz, M. R., **Guest, D. R.**, Montazeri, V., Baese-Berk, M. M., & Assmann, P. F. (2021). Effects of spectral envelope and fundamental frequency shifts on the perception of foreign-accented speech. *Language and Speech*, 1–26. 🔗 doi:10.1177/002383092

Guest, D. R., & Oxenham, A. J. (2019). The role of pitch and harmonic cancellation when listening to speech in harmonic background sounds. *The Journal of the Acoustical Society of America*, 145(5), 3011–3023.
[doi:10.1121/1.5102169](https://doi.org/10.1121/1.5102169)

Talks

Guest, D. R., Allen, E., Wu, Y., Naselaris, T., Arcaro, M., & Kay, K. N. (2021). Evidence for a ventral visual stream in the pulvinar. Contributed talk presented at VSS 2021 (virtual).

Guest, D. R., & Oxenham, A. J. (2019). Pitch perception of concurrent high-frequency complex tones. Invited talk presented at ASA 2019 Louisville. [doi:10.1121/1.5101520](https://doi.org/10.1121/1.5101520)

Posters

Guest, D. R., & Oxenham, A. J. (2021). Fundamental frequency discrimination in mixtures of high-frequency complex tones: Data and ideal-observer model predictions. Poster presented at ARO 2021 (virtual).

Guest, D. R., & Oxenham, A. J. (2020). Modeling pitch perception of concurrent high-frequency complex tones with auditory nerve simulations. Poster presented at ARO 2020.

Guest, D. R., & Oxenham, A. J. (2020). Perception of melody and triads at high frequencies. Poster presented at ASA 2020 (virtual). [doi:10.1121/1.5146799](https://doi.org/10.1121/1.5146799)

Guest, D. R., & Oxenham, A. J. (2019). Pitch perception of concurrent high-frequency complex tones. Poster presented at ARO 2019.

Guest, D. R., & Oxenham, A. J. (2019). Pitch perception of concurrent high-frequency complex tones: Modeling behavior with auditory nerve simulations. Poster presented at ISAAR 2019.

Guest, D. R., & Oxenham, A. J. (2018). The role of pitch and harmonic cancellation in simultaneous speech segregation. Poster presented at 2018 UMN Center for Cognitive Science Spring Research Day.

Guest, D. R., & Oxenham, A. J. (2018). The role of pitch and harmonic cancellation when listening to speech in background sounds. Poster presented at ASA 2018 Victoria. [doi:10.1121/1.5068208](https://doi.org/10.1121/1.5068208)

Kapolowicz, M. R., **Guest, D. R.,** Montazeri, V., Baese-Berk, M. M., & Assmann, P. F. (2018). Perception of spectrally-shifted non-native speech. Poster presented at ASA 2018 Victoria. [doi:10.1121/1.5068208](https://doi.org/10.1121/1.5068208)

Guest, D. R. (2017). Perception of voice gender in children's voices by cochlear implant users. Poster presented at 6th UT Dallas Annual Exhibition of Excellence in Undergraduate Research.

Guest, D. R., Montazeri, V., Kapolowicz, M. R., & Assmann, P. F. (2017). Perception of voice gender in children's voices by cochlear implant users. Poster presented at ASA 2017 Boston. [doi:10.1121/1.4988543](https://doi.org/10.1121/1.4988543)

Kapolowicz, M. K., **Guest, D. R.,** Montazeri, V., & Assmann, P. F. (2017). Effect of frequency shifts on talker recognition in native and foreign-accented speech. Poster presented at ASA 2017 New Orleans.
[doi:10.1121/1.5014953](https://doi.org/10.1121/1.5014953)

Guest, D. R. (2016). Perception of voice gender in cochlear implant simulations of children's speech. Poster presented at the 5th UT Dallas Annual Exhibition of Excellence in Undergraduate Research.

Guest, D. R., Kapolowicz, M. R., Hossain, S., Montazeri, V., & Assmann, P. F. (2016). Perception of voice gender in cochlear implant simulations of children's speech. Poster presented at ASA 2016 Salt Lake City.
[doi:10.1121/1.4950328](https://doi.org/10.1121/1.4950328)

Professional service

Acoustical Society of America

- 2019 Co-organized “Guidance from the Experts: Applying for Grants and Fellowships” special panel session at ASA San Diego
- 2018 – 2020 Student Council Representative (Psychological and Physiological Acoustics)

University of Minnesota

- 2019 – ... Graduate Student Representative (Cognitive and Brain Sciences)

Skills

Computers	bash, git, \LaTeX , Linux
Languages	English (native), Spanish, Portuguese
Mathematics	Differential equations, linear algebra, multivariable calculus, real analysis
Programming languages	Python (proficient), R (proficient), MATLAB (proficient), Julia (familiar)
Statistics	Bayesian statistics, estimation theory, generalized linear regression, multi-level/hierarchical regression, neural networks, probability theory