Abigail Anne Kressner

[aakress@dtu.dk](mailto:aakress@dtu.dk) · [abigail.anne.kresser@regionh.dk](mailto:abigail.anne.kressner@regionh.dk)

[http://cv.abbiekressner.com](http://cv.abbiekressner.com/)

[ORCID: 0000-0003-4274-3948](https://orcid.org/0000-0003-4274-3948)

# Education

2011-2015 Ph.D. · Electrical and Computer Engineering · Georgia Institute of Technology

2009-2011 M.S. · Electrical and Computer Engineering · Georgia Institute of Technology

2008 Audiology · Vanderbilt University

2004-2007 B.S. · Biomedical Engineering · Washington University in St. Louis

# Positions

2019-present Assistant Professor · Technical University of Denmark and Rigshospitalet

2017 Visiting Postdoctoral Researcher · Cochlear, Ltd · Melbourne, Australia

2015-2019 Postdoctoral Researcher · Technical University of Denmark

2014-2015 Visiting Scholar · National Acoustic Laboratories · Sydney, Australia

2008 Research Intern · Widex A/S · Værløse, Denmark

2007 Research Intern · Knowles Electronics, LLC · Illinois, USA

2006 Research Intern · AuSIM, Inc · California, USA

# Research support

2022-2023 Project grant co-funded by GN Resound, Widex, and Demant (PI; DKK 1.5m)

2015-2017 Postdoctoral grant from Det Frie Forskningsråd (DFF; Danish Council for Independent Research; DKK 1.8m)

2014-2015 National Science Foundation (NSF) Graduate Research Opportunities Worldwide (GROW; AUD 20k)

2010-2015 National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP; USD 138k)

2010-2013 National Defense Science & Engineering Graduate (NDSEG) Fellowship (USD 225k)

# Awards

2014 International Hearing Aid Conference (IHCON) Scholarship

2014 Chih Foundation Research Award

2009-2013 President’s Fellowship · Georgia Institute of Technology

2011 ISAAR and GN Foundation Young Scientist Conference Scholarship

2010 21st Annual SAIC Student Paper Competition · First place

2004-2007 Jeﬀrey & Nancy Balter Biomedical Engineering Scholar · Washington University in St. Louis

2004-2005 Society of Women Engineers Scholar

# Selected publications

West, N. C., Kressner, A. A., Baungaard, L. H., Sandvej, M. G., Bille, M., & Cayé-Thomasen, P. (2020). Nordic results of cochlear implantation in adults: speech perception and patient reported outcomes. Acta Oto-Laryngologica, 140(11), 939–947.

Bentsen, T., Mauger, S. J., Kressner, A. A., May, T., & Dau, T. (2019). The impact of noise power estimation on speech intelligibility in cochlear- implant speech coding strategies. The Journal of the Acoustical Society of America, 145(2), 818–821.

Kressner, A. A., May, T., & Dau, T. (2019). Eﬀect of Noise Reduction Gain Errors on Simulated Cochlear Implant Speech Intelligibility. Trends in Hearing, 23, 1–12.

Kressner, A. A., Westermann, A., & Buchholz, J. M. (2018). The impact of reverberation on speech intelligibility in cochlear implant recipients. The Journal of the Acoustical Society of America, 144(2), 1113–1122.

Bentsen, T., May, T., Kressner, A. A., & Dau, T. (2018) The beneﬁt of combining a deep neural network architecture with ideal ratio mask estimation in computational speech segregation to improve speech intelligibility, PLOS ONE, 13(5):e0196924.

Bentsen, T., Kressner, A. A., Dau, T., & May, T. (2018) The impact of exploiting spectro-temporal context in computational speech segregation. Journal of the Acoustical Society of America, 143(1):248-259.

Kressner, A. A., May, T., & Rozell, C. J. (2016) Outcome measures based on classiﬁcation performance fail to predict the intelligibility of binary-masked speech. Journal of the Acoustical Society of America, 139(6):3033-3036.

Kressner, A. A., Westermann, A., Buchholz, J. M., & Rozell, C. J. (2016). Cochlear implant speech intelligibility outcomes with structured and unstructured binary mask errors. The Journal of the Acoustical Society of America, 139(2), 800–810.

Kressner, A. A, & Rozell, C. J. (2015). Structure in time-frequency binary masking errors and its impact on speech intelligibility. The Journal of the Acoustical Society of America, 137(4), 2025.

Kressner, A. A., Anderson, D. V., & Rozell, C. J. (2013) Evaluating the generalization of the Hearing Aid Speech Quality Index (HASQI). IEEE Transactions in Audio, Speech and Language Processing, 21(2):407-415.

# Student supervision

PhD co-supervision: 4; MSc/BSc co-supervision: 6

# Selected professional activities

Ear, Nose, and Throat Surgical & Audiological Clinic’s Research Council; Member of the Danish Sound Cluster’s working group on ‘Healthcare and welfare’; Organizing Committee for the International Symposium on Auditory and Audiological Research; Technical Committee for the Baltic-Nordic Acoustic Meeting 2020; Editor for the Proceedings of the International Symposium on Auditory and Audiological Research; Topic Editor for Audiology Research; Reviewer for Journal of the Association for Research in Otolaryngology, Trends in Hearing, Speech Communication, Journal of the Acoustical Society of America, IEEE Transactions on Audio, Speech, and Language Processing