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Employment

Department of Clinical Research

1. Jul 2024 → 30. Jun 2027

Assistant professor

KI, OUH, Research unit of Oto Rhino Laryngology (Odense)

1. Jul 2024 → 30. Jun 2027

Research outputs

Speech intelligibility declines at near- and above-conversational levels in aided hearing-impaired listeners

Jürgensen, L., Fereczkowski, M. (Member of author group) & Neher, T. (Member of author group), Jun 2024.

Comparison of Two Clinical Devices for the Measurement of Distortion Product Otoacoustic Emissions in Normal-Hearing Adults

Cañete, O. M., El-Haj-Ali, M. & Fereczkowski, M., 24. Feb 2024, In: Journal of Audiology & Otology. 28, 2, p. 146-152

Test-retest evaluation of a notched-noise test using consumer-grade mobile audio equipment

Hyvärinen, P., Fereczkowski, M. & MacDonald, E. N., Feb 2024, In: International Journal of Audiology. 63, 2, p. 127-135

Amplitude Compression for Preventing Rollover at Above-Conversational Speech Levels

Fereczkowski, M., Sanchez-Lopez, R., Klausen, S. & Neher, T., 5. Jan 2024, In: Trends in Hearing. 28

Influence of semantic context information on rollover in aided hearing-impaired listeners

Jürgensen, L., Fereczkowski, M. (Member of author group) & Neher, T. (Member of author group), Jan 2024.

Can Semantic Context Information Mask Rollover In Hearing-Impaired Listeners?

Jürgensen, L., Jacobsen, K. M., Fereczkowski, M. & Neher, T., 23. Aug 2023.

Influence of clinical fitting rationales on rollover at above-conversational speech levels

Fereczkowski, M., Jacobsen, K. M., Jürgensen, L. & Neher, T., 23. Aug 2023.

Semantic context can mask intelligibility declines at above-conversational speech levels in normal-hearing listeners

Fereczkowski, M. & Neher, T., 20. Jun 2023, In: Journal of Speech, Language, and Hearing Research. 66, 6, p. 2177-2183

Can semantic context information mask rollover in hearing-impaired listeners?

Jürgensen, L., Jacobsen, K. M., Fereczkowski, M. & Neher, T., 6. Mar 2023.

Corrigendum: Auditory tests for characterizing hearing deficits in listeners with various hearing abilities: The BEAR test battery

Sanchez-Lopez, R., Nielsen, S. G., El-Haj-Ali, M., Bianchi, F., Fereczkowski, M., Cañete, O. M., Wu, M., Neher, T., Dau, T. & Santurette, S., 25. Jan 2023, In: Frontiers in Neuroscience. 16, 1122830.

Predicting aided outcome with aided word recognition scores measured with linear amplification at above-conversational levels

Fereczkowski, M. & Neher, T., Jan 2023, In: Ear and Hearing. 44, 1, p. 155-166

Influence of clinical fitting rationales on rollover at above-conversational speech levels

Fereczkowski, M., Jacobsen, K. M., Jürgensen, L. & Neher, T., 2023, *Forum Acusticum 2023 - 10th Convention of the European Acoustics Association, EAA 2023*. European Acoustics Association, p. 1-4 (Proceedings of Forum Acusticum).

Towards auditory profile-based hearing-aid fittings: BEAR rationale and clinical implementation

Sanchez-Lopez, R., Wu, M. (Member of author group), Fereczkowski, M. (Member of author group), Santurette, S. (Member of author group), Baumann, M. (Member of author group), Kowalewski, B. (Member of author group), Piechowiak, T. (Member of author group), Bisgaard, N. (Member of author group), Ravn, G. (Member of author group), Narayanan, S. K. (Member of author group), Dau, T. (Member of author group) & Neher, T., 9. Oct 2022, In: *Audiology Research*. 12, 5, p. 564–573

Revisiting auditory profiling: Can cognitive factors improve the prediction of aided speech-in-noise outcome?

Wu, M., Christiansen, S., Fereczkowski, M. & Neher, T., 9. Aug 2022, In: *Trends in Hearing*. 26, 16 p.

Auditory Tests for Characterizing Hearing Deficits in Listeners With Various Hearing Abilities: The BEAR Test Battery

Sanchez-Lopez, R., Grini Nielsen, S., El-Haj-Ali, M., Bianchi, F., Fereczkowski, M., Cañete, O. M., Wu, M., Neher, T., Dau, T. & Santurette, S., 29. Sept 2021, In: *Frontiers in Neuroscience*. 15, 19 p., 724007.

Influence of Three Auditory Profiles on Aided Speech Perception in Different Noise Scenarios

Wu, M., Cañete, O. M., Schmidt, J. H., Fereczkowski, M. & Neher, T., 30. Jun 2021, In: *Trends in Hearing*. 25

Towards Auditory Profile-Based Hearing-Aid Fitting: Fitting Rationale and Pilot Evaluation

Sanchez-Lopez, R., Fereczkowski, M., Santurette, S., Dau, T. & Neher, T., 16. Jan 2021, In: *Audiology Research*. 11, 1, p. 10-21

Comparison of Behavioral and Physiological Measures of the Status of the Cochlear Nonlinearity

Fereczkowski, M., Dau, T. & MacDonald, E. N., 2021, In: *Trends in Hearing*. 25, 11 p.

Effects of Noise and Second Language on Conversational Dynamics in Task Dialogue

Sørensen, A. J. M., Fereczkowski, M. & MacDonald, E. N., 2021, In: *Trends in Hearing*. 25

Robust Data-Driven Auditory Profiling Towards Precision Audiology

Sanchez-Lopez, R., Fereczkowski, M., Neher, T., Santurette, S. & Dau, T., 5. Dec 2020, In: *Trends in Hearing*. 24, 19 p.

Investigating the Effects of Four Auditory Profiles on Speech Recognition, Overall Quality, and Noise Annoyance With Simulated Hearing-Aid Processing Strategies

Wu, M., Sanchez-Lopez, R., El-Haj-Ali, M., Nielsen, S. G., Fereczkowski, M., Dau, T., Santurette, S. & Neher, T., 19. Oct 2020, In: *Trends in Hearing*. 24, 12 p.

Perceptual evaluation of six hearing-aid processing strategies from the perspective of auditory profiling: Insights from the BEAR project

Wu, M., Sanchez-Lopez, R., El-Haj-Ali, M., Grini Nielsen, S., Fereczkowski, M., Dau, T., Santurette, S. & Neher, T., 26. Mar 2020, *Proceedings of the International Symposium on Auditory and Audiological Research: Auditory Learning in Biological and Artificial Systems*. Kressner, A. A., Regev, J., Christensen-Dalsgaard, J., Tranebjærg, L., Santurette, S. & Dau, T. (eds.). Danavox Jubilee Foundation, Vol. 7. p. 265-272 (The ISAAR proceedings, Vol. 7).

Robust auditory profiling: Improved data-driven method and profile definitions for better hearing rehabilitation

Sanchez-Lopez, R., Fereczkowski, M., Neher, T., Santurette, S. & Dau, T., 26. Mar 2020, *Proceedings of the International Symposium on Auditory and Audiological Research: Auditory Learning in Biological and Artificial Systems*. Vol. 7. p. 281-288 (The ISAAR proceedings, Vol. 7).

A clinical test battery for Better hEARing Rehabilitation (BEAR): Towards the prediction of individual auditory deficits and hearing-aid benefit

Sanchez-Lopez, R., Grini Nielsen, S., Canete, O., Fereczkowski, M., Wu, M., Neher, T. & Santurette, S., 2019, *Proceedings of the 23rd International Congress on Acoustics: Integrating 4th EAA Euroregio 2019*. Ochmann, M., Michael, V. & Fels, J. (eds.). German Acoustical Society (DEGA), p. 3841-3848

Assessing the interaction between different auditory profiles and benefit from six hearing aid processing strategies: Insights from the BEAR project

Wu, M., Sanchez-Lopez, R., El-Haj-Ali, M., Grini Nielsen, S., Fereczkowski, M., Dau, T., Santurette, S. & Neher, T., 2019, *Proceedings of the 23rd International Congress on Acoustics: Integrating 4th EAA Euroregio 2019*. Ochmann, M., Michael, V. & Fels, J. (eds.). German Acoustical Society (DEGA), p. 3849-3856

Auditory tests for characterizing individual hearing deficits: The BEAR test battery

Sanchez Lopez, R., Fereczkowski, M., Bianchi, F., El-Haj-Ali, M., Neher, T., Dau, T. & Santurette, S., 17. Aug 2018.

Hearing aid processing strategies for listeners with different auditory profiles: Insights from the BEAR project

Wu, M., El-Haj-Ali, M., Sanchez Lopez, R., Fereczkowski, M., Bianchi, F., Dau, T., Santurette, S. & Neher, T., 16. Aug 2018.

Technical evaluation of hearing-aid fitting parameters for different auditory profiles

Sanchez-Lopez, R., Fereczkowski, M., Bianchi, F., Piechowiak, T., Hau, O., Syskind Pedersen, M., Behrens, T., Neher, T., Dau, T. & Santurette, S., 2018, *Proceedings of Euronoise 2018*. European Acoustics Association, p. 381-388 (Euronoise).

Activities

Can rollover at above-conversational speech levels be used to assess cochlear synaptopathy in listeners with normal audiograms?

Fereczkowski, M. (Author), Van Yper, L. N. (Co-author) & Neher, T. (Co-author)
19. Aug 2024 → 25. Aug 2024

Detecting and compensating for rollover at moderate-to-high speech levels

Jürgensen, L. (Speaker), Fereczkowski, M. (Co-author) & Neher, T. (Co-author)
19. Aug 2024 → 25. Aug 2024

Influence of clinical fitting rationales on rollover at above-conversational speech levels

Fereczkowski, M. (Speaker), Jacobsen, K. M. (Co-author), Jürgensen, L. (Co-author) & Neher, T. (Co-author)
11. Sept 2023 → 15. Sept 2023

Amplitude compression for listeners with rollover at above-conversational speech levels

Fereczkowski, M. (Speaker), Klausen, S. (Co-author), Sanchez-Lopez, R. (Co-author) & Neher, T. (Co-author)
10. Aug 2022 → 14. Aug 2022

Hearing-aid amplitude compression for listeners with rollover at above-conversational speech levels

Fereczkowski, M. (Speaker), Klausen, S. (Co-author), Sanchez-Lopez, R. (Co-author) & Neher, T. (Co-author)
1. Jun 2022 → 3. Jun 2022

Towards auditory profile-based hearing-aid fittings: Insights from the BEAR project

Neher, T. (Speaker), Sanchez-Lopez, R. (Co-author), Wu, M. (Co-author), Fereczkowski, M. (Co-author), Santurette, S. (Co-author) & Dau, T. (Co-author)
1. Jun 2022 → 3. Jun 2022

Hearing-aid amplitude compression for listeners with rollover at above-conversational speech levels

Fereczkowski, M. (Speaker), Klausen, S. (Co-author), Sanchez-Lopez, R. (Co-author) & Neher, T. (Co-author)
9. May 2022 → 11. May 2022

Towards auditory profile-based hearing-aid fittings: BEAR rationale and clinical implementation

Sanchez-Lopez, R. (Speaker), Fereczkowski, M. (Co-author), Wu, M. (Co-author), Santurette, S. (Co-author), Baumann, M. (Co-author), Kowalewski, B. (Co-author), Piechowiak, T. (Co-author), Ravn, G. (Co-author), Narayanan, S. K. (Co-author), Dau, T. (Co-author) & Neher, T. (Co-author)
9. May 2022 → 11. May 2022

Influence of three auditory profiles on aided speech perception in different noise scenarios

Wu, M. (Author), Cañete, O. (Co-author), Schmidt, J. (Co-author), Fereczkowski, M. (Co-author) & Neher, T. (Co-author)
20. Jan 2022 → 21. Jan 2022

Rollover effects at above-conversational levels in speech materials with low but not high context

Fereczkowski, M. (Author) & Neher, T. (Co-author)
20. Jan 2022 → 21. Jan 2022

Towards auditory profile-based hearing-aid fittings: Insights from the BEAR project

Sanchez-Lopez, R. (Co-author), Wu, M. (Co-author), Fereczkowski, M. (Co-author), Santurette, S. (Co-author), Dau, T. (Co-author) & Neher, T. (Keynote speaker)
27. Aug 2021

Maximum aided word recognition score and rollover presence at higher-than-normal speech levels predict hearing-aid outcome effectively

Fereczkowski, M. (Author) & Neher, T. (Co-author)
25. Aug 2021

Rollover effects at higher-than-normal levels in speech materials with low but not high context

Fereczkowski, M. (Author), Mikkelsen, B. D. (Co-author) & Neher, T. (Co-author)
24. Aug 2021

Revisiting auditory profiling: Can cognitive factors improve the prediction of aided speech-in-noise outcome?

Wu, M. (Author), Klausen, S. (Co-author), Fereczkowski, M. (Co-author) & Neher, T. (Co-author)
23. Aug 2021

Influence of three auditory profiles on aided speech perception in different noise scenarios

Wu, M. (Speaker), Canete, O. (Co-author), Hvass Schmidt, J. (Co-author), Fereczkowski, M. (Co-author) & Neher, T. (Co-author)
21. May 2021

Auditory Profiling: Exploring Differences in Auditory Processing Abilities Towards Profile-based Hearing-aid fitting strategies

Sanchez-Lopez, R. (Speaker), Fereczkowski, M. (Co-author), Santurette, S. (Co-author), Whitmer, W. (Co-author), Neher, T. (Co-author) & Dau, T. (Co-author)
20. May 2021

Can word recognition scores predict aided outcome and guide hearing-aid fitting?

Fereczkowski, M. (Speaker) & Neher, T. (Co-author)
20. May 2021

Can word recognition scores predict aided outcome and guide hearing-aid fitting?

Fereczkowski, M. (Speaker) & Neher, T. (Co-author)
12. Feb 2021

A clinical test battery for Better hEARing Rehabilitation (BEAR) - Towards the prediction of individual auditory deficits and hearing-aid benefit

Sanchez-Lopez, R. (Speaker), Grini Nielsen, S. (Other), Cañete, O. (Other), Fereczkowski, M. (Other), Wu, M. (Other), Neher, T. (Other), Dau, T. (Other) & Santurette, S. (Other)
9. Sept 2019 → 13. Sept 2019

Assessing the interaction between different auditory profiles and benefit from six hearing aid processing strategies: Insights from the Better hEARing Rehabilitation (BEAR) project

Wu, M. (Speaker), Sanchez-Lopez, R. (Other), El-Haj-Ali, M. (Other), Grini Nielsen, S. (Other), Fereczkowski, M. (Other), Bianchi, F. (Other), Dau, T. (Other), Santurette, S. (Other) & Neher, T. (Other)
9. Sept 2019 → 13. Sept 2019

Evaluation of six hearing-aid processing strategies from the perspective of auditory profiling: Insights from the BEAR project

Wu, M. (Speaker), Sanchez-Lopez, R. (Other), El-Haj-Ali, M. (Other), Nielsen, S. G. (Other), Fereczkowski, M. (Other), Dau, T. (Other), Santurette, S. (Other) & Neher, T. (Other)
21. Aug 2019 → 23. Aug 2019

Robust auditory profiling: Improved data-driven method and profile definitions towards a better hearing rehabilitation

Sanchez-Lopez, R. (Speaker), Fereczkowski, M. (Other), Neher, T. (Other), Santurette, S. (Other) & Dau, T. (Other)
21. Aug 2019 → 23. Aug 2019

Auditory profiling as a tool for characterizing individual hearing deficits: Data-driven analysis of the results of the BEAR test battery

Sanchez-Lopez, R. (Other), Grini Nielsen, S. (Other), El-Haj-Ali, M. (Other), Cañete, O. (Other), Wu, M. (Other), Fereczkowski, M. (Other), Bianchi, F. (Other), Neher, T. (Speaker), Dau, T. (Other) & Santurette, S. (Other)
23. May 2019

Hearing aid processing strategies for listeners with different auditory profiles: Insights from the BEAR project

Wu, M. (Other), Sanchez-Lopez, R. (Other), El-Haj-Ali, M. (Other), Grini Nielsen, S. (Other), Fereczkowski, M. (Other), Bianchi, F. (Other), Dau, T. (Other), Santurette, S. (Other) & Neher, T. (Speaker)
23. May 2019

Technical evaluation of hearing-aid fitting parameters for different auditory profiles

Sanchez-Lopez, R. (Speaker), Bianchi, F. (Other), Fereczkowski, M. (Other), Piechowiak, T. (Other), Hau, O. (Other), Syskind Pedersen, M. (Other), Behrens, T. (Other), Neher, T. (Other), Dau, T. (Other) & Santurette, S. (Other)
27. May 2018 → 30. May 2018

1. Formal educational training

a.
"Teaching and Learning" course at DTU

2. Administrative tasks relating to education

a
Co-organizer of exercises in Auditory Signal Processing course at the Technical University of Denmark (DTU).

i. Time: Single year in the period 2011-2018

ii. Content: Revising exercise content

b.
Co-organizer of the "Mathematics for audiologists" course at SDU

i. Time: 2021-2022

ii. Content: programme, lectures and exercises organization

3. Experience of study programmes, supervision and examinations

a.
Lecturer and examiner of the "Mathematics for audiologists"

b.
Teaching assistant at the "Linear signals and systems" course at DTU

i. Time: 2009, 2010

ii. Content: exercise supervision

c.
Teaching assistant at the "Auditory signal processing" course at DTU

i. Time: 2011-2020

ii. Content: exercise supervision

d.
Co-supervisor of BSc students (x3) at SDU

i. Kathrine Sønderhøj Nørager Jørgensen

1. Time: 2020

ii. Amalie Maklary Rudbeck-Rønne

1. Time: 2020

iii. Benedikte Degn Mikkelsen

1. Time: 2021

e.

Co-supervisor of MSc students (x2) at DTU

i. Konstantinos Anyfantakis

1. Time: 2017

2. Title: "Comparison of objective and subjective measures of cochlear compression"

ii. Josefine Munch Sørensen

1. Time: 2017

2. Title: "The Influence of Noise and Second Language on Conversational Dynamics"

f.

Co-supervisor of PhD students (x4) at DTU and SDU

i. Borys Kowalewski

1. Time: 2016-2019

2. Title: "Assessing the effects of hearing-aid dynamic-range compression on auditory signal processing and perception".

ii. Raul Sanchez-Lopez

1. Time: 2017-2020

2. Title: "Clinical auditory profiling and profile-based hearing-aid fitting"

iii. Mengfan Wu

1. Time: 2018-2021

2. Title: "Investigating Speech-in-Noise Outcome in Older Hearing-Aid Users Using Auditory Profiling"

iv. Lukas Joergensen

1. Time: 2022 –

2. Title: Ongoing

4. Methods, materials and tools

a.

Power-point slides and MATLAB-based animations

6. Reflection on your own teaching practice and future development¹, including student evaluations

a.

Pre-recorded lectures (individual slides in Power Point with added voice and transcript) are appreciated by the students, who can watch the slides more than once, if necessary.

b.

In terms of lectures and exercises, my experience suggests that students need concrete tasks and clear expectations, so they know what and when to do. Therefore, assignments are a necessity.