

# CURRICULUM VITAE

Prof. Dr. rer. nat. Sascha Frühholz

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## BIOGRAPHICAL INFORMATION

Titles Dr. rer. nat. habil. / Ph.D. in Neurobiology  
Graduations Diploma in Psychology (**Dipl.-Psych.**)  
Diploma in Science of Education (**Dipl.-Paed.**)  
Current Working Address University of Oslo, UiO, Department of Psychology  
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<https://www.psychology.uzh.ch/en/areas/nec/kaneuro.html>

## RESEARCH-BASED IDS

Google Scholar: <https://scholar.google.ch/citations?user=BOQ8VjoAAAAJ&hl=en>

ResearcherID: [I-4335-2016](https://orcid.org/0000-0002-6485-3817)

ORCID ID: [0000-0002-6485-3817](https://orcid.org/0000-0002-6485-3817)

## EDUCATION

06/16 **Habilitation** (Dr. rer. nat. habil.), University of Jena, Jena, Germany  
Thesis title: "Nonverbal affective communication: The neural network for the production and perception of vocal emotions"

02/06 - 11/08 **PhD Graduation** (Dr. rer. nat.), University of Bremen, Bremen, Germany  
Thesis title: "Contextual modulation during the processing of facial expressions: Behavioral, fMRI, and ERP investigations"

02/01 - 04/06 **Diploma in Psychology**, University of Bremen, Bremen, Germany  
Graduation as »Dipl.-Psych.« / Overall grade: 1.00  
Majors: Clinical Psychology, Neuropsychology, Forensic Psychology, Educational Psychology; Minors: Neurology, Pedagogue

02/96 - 11/01 **Diploma in Science of Education**, University of Augsburg, Augsburg, Germany  
Graduation as »Dipl.-Päd. Univ.« / Overall grade: 1.16  
Major: Youth and Adult Education; Minors: Sociology, Psychology

09/94 – 02/96 **Technical Engineering**  
Technical University of Munich, Munich, Germany  
Major: Aeronautics and Spaceflight Technique

## ACADEMIC EMPLOYMENT AND RESEARCH EXPERIENCE

11/20 – now **Full Professor (Clinical and Cognitive Neuroscience)**  
Department of Psychology, University of Oslo, Norway

03/20 – 10/20 **Associate Professor (Clinical and Cognitive Neuroscience)**  
Department of Psychology, University of Oslo, Norway

09/15 – 12/22 **SNSF Professor (Cognitive and Affective Neuroscience)**  
Department of Psychology, University of Zürich, Switzerland

01/13 – 08/15 **Senior Research Associate and Principal Investigator (PI)**  
Swiss Center for Affective Sciences  
University of Geneva, Geneva, Switzerland

01/10 – 12/12 **Post-doctoral Research Associate**  
Department of Psychology, University of Geneva, Geneva, Switzerland  
Neuroscience of Emotions and Affective Dynamics (NEAD) Laboratory

- 12/08 – 12/09 **Post-doctoral Research Associate**  
University of Bremen, Bremen, Germany  
Department of Neuropsychology and Behavioral Neurobiology
- 02/06 – 11/08 **PhD Student and Research Associate**  
University of Bremen, Bremen, Germany  
Department of Neuropsychology and Behavioral Neurobiology
- 09/07 **Visiting Scientist**  
University of Barcelona, Barcelona, Spain  
Cognitive Neuroscience Research Group
- 07/05 – 12/05 **Student Assistant**  
University of Bremen, Bremen, Germany  
Department of Neuropsychology and Behavioral Neurobiology  
Head of the group: Prof. Manfred Herrmann

## HONORS AND AWARDS

- 02/15 SNSF Professorship awarded by the Swiss National Science Foundation
- 04/05 Nominated for the best teaching award (Berninghausen Prize) at the University of Bremen

## JOURNAL BOARD MEMBERSHIP

- Cortex  
Frontiers in Emotion Science (Reviewing Editor)  
Frontiers in Human Neuroscience (Associate Editor)

## PUBLICATIONS

### Edited books and monographs

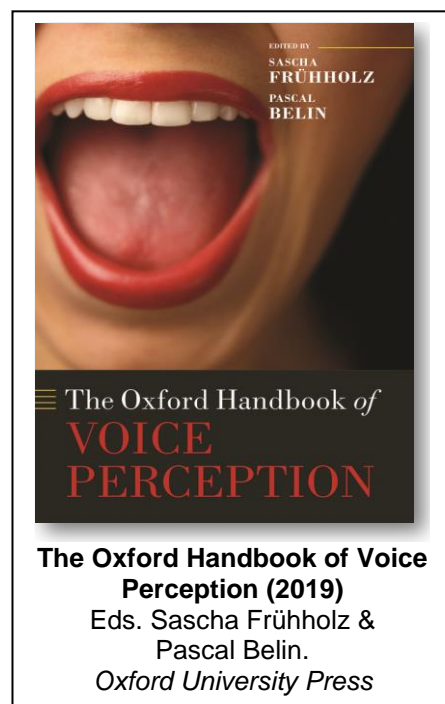
Frühholz, S, Belin, P (Eds.) (2018). *The Oxford Handbook of Voice Perception*. Oxford UK, Oxford University Press.

Frühholz, S (2016). *Nonverbal affective communication: The neural network for the production and the perception of vocal emotions*. Jena, Jena University Press.

Frühholz, S (2008). *Contextual modulation during processing of facial expressions: Behavioral, fMRI and ERP investigations*. Bremen, Bremen University Press.

### Research Articles

- (1) Brookes J, Hall S, Frühholz S, Bach DR (2023). Immersive VR for investigating threat avoidance: The VRthreat toolkit for Unity. *Behavior Research Methods*.
- (2) Hautle LL, Kurath J, Jellestad L, Lüönd AM, Wingenbach TSH, Frühholz S, Jansson B, Niedtfeld I, Pfaltz MC (2023). Individuals with and without child maltreatment experiences are evaluated similarly and do not differ in facial affect display at zero- and first-acquaintance. *Borderline Personal Disord Emot Dysregul*, 10(1):17
- (3) Staib, M, Frühholz, S (2023). Distinct functional levels of human voice processing in the auditory cortex. *Cerebral Cortex*, bhac128.
- (4) Trevor, C, Renner, M, Frühholz, S (2023). Acoustic and structural differences between musically portrayed subtypes of fear. *The Journal of the Acoustical Society of America*, 153, 384.
- (5) Skjegstad, CL, Trevor, C, Swanborough, H, Roswadowitz, C, Mokros, A, Habermeyer, E, Frühholz, S (2022). Psychopathic and autistic traits differentially influence the neural mechanism of social cognition from communication signals. *Translational Psychiatry*, 12(1):494
- (6) Von Eiff, CI, Frühholz, S, Korth, D, Guntinas-Lichius, O, Schweinberger, SR (2022). Crossmodal benefits to vocal emotion perception in cochlear implant users. *iScience*, 25(12): 105711



- (7) Skjeggstad, CL, Trevor, C, Swanborough, H, Roswadowitz, C, Mokros, A, Habermeyer, E, Frühholz, S (2022). Psychopathic and autistic traits differentially influence the neural mechanism of social cognition from human voices. *Translational Psychiatry*, 494.
- (8) Guex, R, Grandjean, D, Frühholz, S (2022). Behavioral correlates of temporal attention biases during emotional prosody perception. *Scientific Reports*, 12:16754
- (9) Steiner, F, Fernandez, N, Dietziker, J, Stämpfli, P, Seifritz, E, Rey, A, Frühholz, S (2022). Affective vocalizations modulate a cortico-limbic network in real time. *Progress in Neurobiology*
- (10) Brassler M, Frühholz S, Schneeberger AR, Ruschetti GG, Schaerli R, Häner M, Studer-Luethi B (2022). A randomized controlled trial study of a multimodal intervention va. Cognitive training to foster cognitive and affective health in older adults. *Frontiers in Psychology*, 13:866613
- (11) von Eiff CI, Frühholz S, Korth D, Guntinas-Lichius O, Schweinberger SR (2022). Crossmodal benefits to vocal emotion perception in cochlear implant users. *iScience*, 25(12):105711
- (12) von Eiff CI, Skuk VG, Zäske R, Nussbaum C, Frühholz S, Feuer U, Guntinas-Lichius O, Schweinberger SR (2022). Parameter-specific morphing reveals contributions of timbre to the perception of vocal emotions in cochlear implant users, *Ear and Hearing*, epub.
- (13) Trevor C, Frühholz S (2021). The evolutionary benefit of less-credible affective musical signals for emotion induction during storytelling, *Behavior and Brain Science*, 44:e118
- (14) Steiner, F, Bobin, M, Frühholz, S (2021). Auditory cortical micro-networks show differential connectivity during voice and speech processing in humans. *Communications Biology*, 4, 801.
- (15) Handler, A, Frühholz, S (2021). Eyewitness memory for person identification: Predicting mug-book recognition accuracy according to person description abilities and subjective confidence of witnesses. *Frontiers on Psychology*.
- (16) Ceravolo, L, Schaerlaeken, S, Frühholz, S, Glowinski, D, Grandjean, D (2021). Frontoparietal, cerebellum network codes for accurate intention prediction in altered perceptual conditions. *Cerebral Cortex Communications*, 2, tgab031.
- (17) Ceravolo, L, Frühholz, S, Pierce, J, Grandjean, D, Peron, J (2021). Basal ganglia and cerebellum contributions to vocal emotion processing as revealed by high-resolution fMRI. *Scientific Reports*, 11, 10645.
- (18) Frühholz, S, Dietziker, J, Staib, M, Trost, W (2021). Neurocognitive processing efficiency for non-alarm rather than alarm signaling in human scream calls. *Plos Biology*, 19(4), e3000751.
- (19) Kegel LC, Frühholz S, Grunwald T, Mersch D, Rey A, Jokeit H (2021). Temporal lobe epilepsy alters neural responses to human and avatar facial expressions in the face perception network. *Brain and Behavior*.
- (20) Dietziker, J, Staib, M, Frühholz, S (2021). Neural competition between concurrent own-speech production and other-speech perception. *NeuroImage*, 228, 117710.
- (21) Staib, M, Frühholz, S (2021). Cortical voice processing is grounded in elementary sound analyses for vocalization relevant sound patterns. *Progress in Neurobiology*.
- (22) Swanborough, H, Staib, M, Frühholz, S (2020). Neurocognitive dynamics of near-threshold voice signal detection and affective voice evaluation. *Science Advances*, 6(50):eabb3884.
- (23) Roswadowitz, C, Swanborough, H, Frühholz, S (2020). Categorizing human vocal signals depends on an integrated auditory-frontal cortical network. *Human Brain Mapping*, 42, 1503-1517
- (24) Trevor, C, Arnal, L, Frühholz, S (2020) Terrifying film music mimics alarming acoustic features of human screams. *Journal of the Acoustical Society of America*, 147, 6
- (25) Gruber, T, Debracque, C, Ceravolo, L, Igloi, K, Marin Bosch, B, Frühholz, S, Grandjean, D (2020). Human discrimination and categorization of emotions in voices: a functional near-infrared spectroscopy (fNIRS) study. *Frontiers in Neuroscience*, 14:570
- (26) Kegel, LC, Brugger, P, Frühholz, S, Grunwald, T, Hilfiker, P, Kohlen Oona, Loertscher, ML, Mersch, D, Rey, A, Sollfrank, T, Steiger, BK, Sternagel, J, Weber, M, Jokeit, H (2020). Dynamic human and avatar facial expressions elicit differential brain responses. *Social, Cognitive, and Affective Neuroscience*, 15, 303-317
- (27) Frühholz, S, Trost, W, Constantinescu, I, Grandjean, D (2020). Neural dynamics of karaoke-like voice imitation in singing performance. *Frontiers in Human Neuroscience*, 14:135
- (28) Frühholz, S, Trost, W, Grandjean, D, Belin, P (2020). Neural oscillations in human auditory cortex revealed by fast fMRI during auditory perception. *NeuroImage*. 207, 116401
- (29) Dricu, M, Frühholz, S (2019). A neurocognitive model of perceptual decision-making on emotional signals. *Human Brain Mapping*, 41, 1532-1556
- (30) Domínguez-Borràs, J, Guex, R, Méndez-Bértolo, C, Legendre, G, Spinelli, L, Moratti, S, Frühholz, S, Mégevand, P, Arnal, L, Strange, B, Seeck, M. & Vuilleumier, P (2019). Human amygdala response to unisensory and multisensory emotion input: No evidence for superadditivity from intracranial recordings. *Neuropsychologia*, 131, 9-24
- (31) Coll, S, Frühholz, S, Grandjean, D (2018). Audiomotor integration of angry and happy prosodies. *Psychological Research*, 1-16
- (32) Coll, S, Ceravolo, L, Frühholz, S, Grandjean, D (2018). The behavioral and neural binding phenomena during visuomotor integration of angry facial expressions. *Scientific Reports*, 8, 6887

- (33) Deng, J, Xu, X, Zhang, Z, Frühholz, S, Schuller, B (2018). Semi-supervised autoencoders for speech emotion recognition. *IEEE Transactions on Audio, Speech and Language Processing*, 26, 31-43
- (34) Schobert, A.K, Corradi-Dell'Acqua, C, Frühholz, S, van der Zwaag, W, Vuilleumier, P (2018). Functional organization of face processing in the human superior temporal sulcus: A 7T high-resolution fMRI study. *Social, Cognitive, and Affective Neuroscience*, 13, 102-113
- (35) Dricu, M, Ceravolo, L, Grandjean, D, Frühholz, S (2017). Biased and unbiased perceptual decision-making on vocal emotions. *Scientific Reports*, 7, 16274
- (36) Frühholz, S\*, Schlegel, K\*, Grandjean, D (2017). Amygdala structure and core dimensions of the affective personality. *Brain Structure and Function*, 222, 3915-3925
- (37) Deng, J, Xu, X, Zhang, Z, Frühholz, S, Schuller, B (2017). Universum autoencoder-based domain adaptation for speech emotion recognition. *IEEE Signal Processing Letters*, 24, 500-504
- (38) Peschke, P, Köster, R, Korsch, M, Frühholz, S, Thiel, C, Herrmann, M, Hilgetag, C (2016). Selective perturbation of cognitive conflict in the human brain - A combined fMRI and rTMS study. *Scientific Reports*, 6:38700
- (39) Dricu, M, Frühholz, S (2016). Perceiving emotional expressions in others: activation likelihood estimation meta-analyses of explicit evaluation, passive perception and incidental perception of emotions. *Neuroscience and Biobehavioral Reviews*, 71, 810-828
- (40) Pannese, A, Grandjean, D, Frühholz, S (2016). Amygdala and auditory cortex exhibit distinct sensitivity to relevant acoustic features of auditory emotions. *Cortex*, 85, 116-125
- (41) Deng, J, Xu, X, Zhang, Z, Frühholz, S, Schuller, B (2016). Exploitation of phase-based features for whispered speech emotion recognition. *IEEE Access*, 4, 4299-4309
- (42) Frühholz, S, Marchi, E, Schuller, B (2016). The effect of narrow-band transmission on recognition of paralinguistic information from human vocalizations. *IEEE Access*, 4, 6059-6072
- (43) Frühholz, S, Trost, W, Grandjean, D (2016). Whispering - the hidden side of auditory communication. *NeuroImage*, 142, 602-612
- (44) Frühholz, S, van der Zwaag, W, Seanz, M, Belin, P, Schobert, A.-K, Vuilleumier, P, Grandjean, D (2016). Neural decoding of discriminative auditory object features depends on their socio-affective value. *Social, Cognitive, and Affective Neuroscience*, 11, 1638-1649
- (45) Ceravolo, L, Frühholz, S, Grandjean, D (2016). Modulation of auditory spatial attention through emotional prosody: an fMRI auditory dot-probe study. *Frontiers in Neuroscience*, 10, 216
- (46) Korsch, M, Frühholz, S, Herrmann, M (2016). Conflict-specific aging effects mainly manifest in early information processing stages—an ERP study with different conflict types. *Frontiers in Aging Neuroscience*, 16, 53
- (47) Ceravolo, L, Frühholz, S, Grandjean, D (2016). Proximal vocal threat recruits the right voice-sensitive auditory cortex. *Social, Cognitive, and Affective Neuroscience*, 11, 793-802
- (48) Peron, J\*, Frühholz, S\*, Ceravolo, L, Grandjean, D (2016). Structural and functional connectivity of the subthalamic nucleus during vocal emotion decoding. *Social, Cognitive, and Affective Neuroscience*, 11, 349-356
- (49) Korb, S\*, Frühholz, S\*, Grandjean, D (2015). Reappraising the voices of wrath. *Social, Cognitive, and Affective Neuroscience*, 10, 1644-1660
- (50) Trost, W, Frühholz, S, Cochrane, T, Cojan, Y, Vuilleumier, P (2015). Temporal dynamics of musical emotions examined through intersubject synchrony of brain activity. *Social, Cognitive, and Affective Neuroscience*, 10, 1705-1721
- (51) Klaas, HS\*, Frühholz, S\*, Grandjean, D (2015). Aggressive vocal expressions – and investigation of their underlying neural network. *Frontiers in Behavioral Neuroscience*, 9, 121
- (52) Trost, W, Frühholz, S (2015). The hippocampus is an integral part of the temporal limbic system during emotional processing: Comment on "The quartet theory of human emotions: An integrative and neurofunctional model" by S. Koelsch et al. *Physics of Life Reviews*, 13, 87-88
- (53) Berron, D, Frühholz, S, Herrmann, M (2015). Neural control of enhanced filtering demands in a combined Flanker and Garner conflict task. *PLoS One*, 10, e0120582
- (54) Frühholz, S, Hofstetter, C, Cristinzio, C, Saj, A, Seeck, M, Vuilleumier, P, Grandjean, D (2015). Asymmetric effects of unilateral right or left amygdala damage on auditory cortical processing of vocal emotions. *Proceedings of the National Academy of Sciences of the USA*. 112, 1583-1588
- (55) Frühholz, S, Gschwind, M, Grandjean, D (2015). Bilateral dorsal and ventral fiber pathways for the processing of affective prosody identified by probabilistic fiber tracking. *NeuroImage*, 109C, 27-34
- (56) Milesi, V, Cekic, S, Peron, J, Frühholz, S, Cristinzio, C, Seeck, M, Grandjean, D (2014). Multimodal emotion perception after anterior temporal lobectomy (ATL). *Frontiers in Human Neuroscience*, 8, 275
- (57) Trost, W, Frühholz, S, Schön, D, Labbé, C, Pichon, S, Grandjean, D, Vuilleumier, P (2014). Getting the beat: entrainment of brain activity by musical rhythm and pleasantness. *NeuroImage*, 103, 55-64

- (58) Korsch, M, Frühholz, S, Herrmann, M (2014). Ageing differentially affects neural processing of different conflict types – an fMRI Study. *Frontiers in Aging Neuroscience*, 6, 57
- (59) Frühholz, S\*, Klaas, HS\*, Patel, S, Grandjean, D (2014). Talking in fury: The cortico-subcortical network underlying the vocal expression of anger. *Cerebral Cortex*, 25, 2752-2762
- (60) Frühholz, S, Grandjean, D (2013). Amygdala subregions differentially respond and rapidly adapt to threatening voices. *Cortex*, 49, 1394-1403
- (61) Frühholz, S, Grandjean, D (2013). Multiple subregions in superior temporal cortex are differentially sensitive to vocal expressions: a quantitative meta-analysis. *Neuroscience and Biobehavioral Reviews*, 37, 24-35
- (62) Frühholz, S, Grandjean, D (2012). Towards a fronto-temporal neural network for the decoding of angry vocal expressions. *NeuroImage*, 62, 1658-1666
- (63) Frühholz, S, Ceravolo, L, Grandjean, D (2012). Specific brain networks during the explicit and implicit decoding of affective prosody. *Cerebral Cortex*, 22, 1107-1117
- (64) Frühholz, S, Jellinghaus, A, & Herrmann, M (2011). Time course of implicit and explicit processing of emotional faces and emotional words. *Biological Psychology*, 87, 265-274
- (65) Frühholz, S, Trautmann, S.A. & Herrmann, M (2011). Contextual interference processing during categorisations of facial expressions. *Cognition & Emotion*, 25, 1045-1073
- (66) Kuchinke, L, Hofmann, M, Jacobs, A.M, Frühholz, S, Tamm, S, & Herrmann, M (2011). Human striatal activation during adjustment of the response criterion in visual word recognition. *NeuroImage*, 54, 2412-2417
- (67) Frühholz, S, Godde, B, Lewicki, P, Herzmann, C, Herrmann, M (2011). Face recognition under ambiguous visual stimulation: fMRI correlates of "encoding styles". *Human Brain Mapping*, 32, 1750-1761
- (68) Frühholz, S, Godde, B, Finke, M, Herrmann, M (2010). Spatio-temporal brain dynamics in a combined stimulus-stimulus and stimulus-response conflict task. *NeuroImage*, 54, 622-634
- (69) Frühholz, S, Prinz, M. & Herrmann, M (2010). Affect-related personality traits and contextual interference processing during perception of facial affect. *Neuroscience Letters*, 469, 260-264
- (70) Frühholz, S, Fehr, T, & Herrmann, M (2009). Early and late temporo-spatial effects of contextual interference during perception of facial affect. *International Journal of Psychophysiology*, 74, 1-13
- (71) Frühholz, S, Fehr, T, & Herrmann, M (2009). Interference control during recognition of facial affect enhances the processing of expression specific properties - an event-related fMRI study. *Brain Research*, 1269, 143-157

### Review articles

- (72) Lie, HC, Gerwing, J, Bondevik, H, Bostad, I, Ellingsen, DM, Frühholz, S, Gulbrandsen, P, Hontvedt, M, De Lange, T, Landmark, AM, Larsen, BH, Menichetti, J (in press). Studying clinical communication through multiple lenses: The underused potential of inter-disciplinary collaborations. *Patient Education and Counseling*.
- (73) Trevor, C, Frühholz, S (2021). The evolutionary benefit of less-credible affective musical signals for emotion induction during storytelling (commentary). *Behavioral and Brain Sciences*.
- (74) Frühholz, S, Schweinberger, S (2021). Nonverbal auditory communication – evidence for integrated neural systems for voice signal production and perception. *Progress in Neurobiology*, 199, 101948
- (75) Young, A, Frühholz, S, Schweinberger, S (2020). Face and Voice Perception: Understanding Commonalities and Differences. *Trends in Cognitive Sciences*, 24, 398-410
- (76) Kupferberg, A, Frühholz, S (2019). Hörminderung im Alter führt zu kognitiven Leistungseinbußen. *Hörkaustik 01/2019*, Median-Verlag
- (77) Frühholz, S, Staib, M (2017). Neurocircuitry of impaired affective sound processing: A clinical disorders perspective. *Neuroscience and Biobehavioral Reviews*, 83, 516-524
- (78) Frühholz, S, Trost, W, Kotz, S (2016). The sound of emotions – towards a unifying neural network perspective of affective sound processing. *Neuroscience and Biobehavioral Reviews*, 68, 96-110
- (79) Pannese, A, Grandjean, D, Frühholz, S (2015). Subcortical processing in auditory communication. *Hearing Research*. 328, 67-77
- (80) Frühholz, S, Sander, D, Grandjean, D (2014). Functional neuroimaging of human vocalizations and affective speech (commentary). *Behavioral and Brain Sciences*. 37, 554-555
- (81) Frühholz, S\*, Trost, W\*, Grandjean, D (2014). The role of the medial temporal limbic system in processing emotions in voice and music. *Progress in Neurobiology*, 123, 1-17
- (82) Frühholz, S, Grandjean, D (2013). Processing of emotional vocalizations in bilateral inferior frontal cortex. *Neuroscience and Biobehavioral Reviews*, 37, 5847-2855
- (83) Péron, J, Grandjean, D, Frühholz, S, Vérin, M (2013). Subthalamic nucleus: a key structure for emotional component synchronization. *Neuroscience and Biobehavioral Reviews*, 37, 358–373.

## Book chapters

- (84) Frühholz, S, Belin, P (2018). The science of voice perception. In: Frühholz, S, Belin, P (Eds.). The Oxford Handbook of Voice Perception. Oxford UK, Oxford University Press, p. 3-14
- (85) Frühholz, S, Ceravolo, L (2018). The neural network underlying the processing of affective vocalizations. In: Frühholz, S, Belin, P (Eds.). The Oxford Handbook of Voice Perception. Oxford UK, Oxford University Press, p. 431-458
- (86) Grandjean, D, Frühholz, S (2013). An integrative model of brain processes of emotional prosody perception. In: Altenmüller, E, Schmidt, S, & Zimmerman, E (Eds.). Evolution of Emotional Communication: From Sounds in Nonhuman Mammals to Speech and Music in Man. Oxford: Oxford University Press
- (87) Frühholz, S, Grandjean, D (2011). Dynamic interaction of attention and emotion: A cognitive neuroscience approach through neural network connectivity. In: Masmoudi, S, Naceur, A, & Dai, Y (Eds.). Attention, Representation and Human Performance: Integration of Cognition, Emotion and Motivation. New York: Psychology Press
- (88) Frühholz, S, Fehr, T, Herrmann, M (2007). Interference processing in emotional face perception is modulated by the emotional valence. In: Herrmann, M. & Thiel, C (Eds.) Topics in Advanced Neuroimaging. Oldenburg: bis-Publishers. pp. 35-38.

## Conference proceedings

- (89) Frühholz, S (2016). On the role of the limbic brain system in recognizing emotions from paralinguistic speech features. Speech Communication, Proceedings of the 12. ITG Symposium
- (90) Deng, J, Xu, X, Zhang, Z, Frühholz, S, Grandjean, G, Schuller, B (2016). Fisher kernels on phase-based features for speech emotion recognition. Proceedings of the 7<sup>th</sup> International Workshop on Spoken Dialogue Systems.

## RESEARCH PROJECTS

Grant description	Funding volume	Funding volume (EUR)
<b>Neuroscientific and computational mechanisms of processing scream signals</b> Funding period: 01/22 – now (1 year) Funding agency: University of Oslo, Department of Psychology Funding ID: UiO strategic funds Applicants: Sascha Frühholz	NOK 200'000	17'369
<b>Neurodynamics of natural and digital emotional communication</b> Funding period: 01/22 – now (3 years) Funding agency: University of Oslo, Department of Psychology Funding ID: UiO strategic funds Applicants: Sascha Frühholz	NOK 3'690'270	320'480
<b>Neurocognitive mechanisms of auditory perception – Challenging the human auditory system at the limits of hearing (2)</b> Funding period: 11/2018 – 06/22 Funding agency: Swiss National Science Foundation SNSF Professorship Funding ID: SNSF PP00P1_183711/1 Applicants: Sascha Frühholz (PI)	CHF 796'785	697'823
<b>Dynamic influences on auditory emotion recognition by modulations of vocally and musically expressed emotions</b> Funding period: 09/2018 – 06/22 Funding agency: Swiss National Science Foundation Funding ID: SNSF 100014_182135/1 Applicants: Sascha Frühholz (PI)	CHF 804'000	707'520
<b>Digital voice technology for emotion recognition</b> Funding period: 10/2018 – 09/2019 Funding agency: InnoSuisse Funding ID: 31487.1 INNO-ICT Applicants: Sascha Frühholz (PI), (Nicolas Perony, OTO systems)	CHF 15'000	13'926

<b>“Voice Theft”: Chances and risks of digital voice technology</b> Funding period: 08/2018 – 09/2020 Funding agency: Swiss National Science Foundation Funding ID: SNSF 10DL15_183152/1 Applicants: Volker Dellwo (PI), Sascha Frühholz (co-PI)	CHF 249'000  Project extension: + CHF 15'000	233'044
<b>Emotional Musical Signals (EMUSIG)</b> Funding period: 02/2019 – 08/21 Funding agency: Swiss National Science Foundation Funding ID: Marie Skłodowska-Curie IF (SEP-210527879) Applicants: Caitlyn Trevor (PI), Sascha Frühholz (Sponsoring PI)	CHF 199'910	191'149
<b>Neural oscillations induced by natural and digital emotional faces</b> Funding period: 08/2018 – 11/2019 Funding agency: Seed funding, research collaboration between the Universities of Zurich (UZH) and Geneva (UNIGE) Funding ID: --- Applicants: Sascha Frühholz (PI), Patrik Vuilleumier (co-PI)	CHF 10'000	8'800
<b>Neurocognitive mechanisms of recognizing socio-affective information in whispered voices</b> Funding period: 08/2017 – 07/2021 Funding agency: Vontobel Foundation (Zurich, Switzerland) Funding ID: --- Applicants: Sascha Frühholz (PI)	CHF 180'000  Project extension: + CHF 28'773	185'110
<b>Funding for scientific equipment</b> Funding period: 02/2016 – 01/2019 Funding agency: Foundation for Scientific Research UZH (University of Zurich) Funding ID: --- Applicants: Sascha Frühholz (PI)	CHF 20'000	17'600
<b>Funding for scientific equipment</b> Funding period: 02/2016 – 01/2019 Funding agency: Investment Funding (University of Zurich) Funding ID: --- Applicants: Sascha Frühholz (PI)	CHF 20'000	17'600
<b>Neurocognitive mechanisms of auditory perception – Challenging the human auditory system at the limits of hearing (1)</b> Funding period: 09/2015 – 08/2019 Funding agency: Swiss National Science Foundation Funding ID: SNSF Professorship SNSF PP00P1_157409/1 Applicants: Sascha Frühholz (PI)	CHF 1'565'000	1'377'200
<b>The sound of a voice: processing of acoustic features of vocal affect in the ascending auditory pathway and higher-level cognitive systems</b> Funding period: 04/2013 – 03/2016 Funding agency: Swiss National Science Foundation Funding ID: SNSF 105314_146559/1 Applicants: Sascha Frühholz (PI)	CHF 474'000	417'120
<b>Travel award by the University of Bremen</b> Funding period: 10/2009 Funding agency: University of Bremen, Germany Applicants: Sascha Frühholz	EUR 2'000	2'000
<b>Travel award by the University of Bremen</b> Funding period: 11/2007 Funding agency: Deutsche Forschungsgemeinschaft (DFG), Germany Applicants: Sascha Frühholz	EUR 1'500	1'500
<b>Total funding</b>		<b>4'280'241</b>

## TEACHING PORTFOLIO

I have 19 years of teaching and supervision experience both within and outside university settings. I have profound theoretical and didactical as well as practical experience with teaching on every level of university teaching, ranging from BSc level, MSc level, to PhD level. Here is a summary of my teaching/supervision experience and teaching qualifications:

- **Venia legendi in Psychology** based on my habilitation obtained in 2016
- I offered **12 lectures** (co-lecturing in 11 courses), **25 seminars**, and **2 workshops**
- Supervision of **31 BSc students**, **29 MSc students**, **9 PhD students**, and **7 postdoctoral fellows**
- University education in **Psychology** with four major specializations: Clinical Psychology, Neuropsychology (including a minor specialization in Neurology), Forensic Psychology, and Educational Psychology
- 5-year full-time university training in the field of **Science of Education**, with a specific focus on youth and adult education and general didactics (diploma degree in 2001); minor studies in **Psychology** and **Sociology**
- Basic training in **Technical Engineering**
- Teaching topics: Cognitive Neuroscience, Systems Neuroscience, Machine Learning and (Big) Data Analysis Methods, Neuroimaging and Neuroscientific Methods, Clinical Psychology, and Forensic Psychology