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Course literature for ALSM21, *Language and the brain*, 7, 5 credits

Approved by section 6 at the Centre for languages and literature, 30 May 2024.

Obligatory literature

- Blank, H., Spangenberg, M., & Davis, M. H. (2018). Neural prediction errors distinguish perception and misperception of speech. *Journal of Neuroscience*, 38(27), 6076–6089. <https://doi.org/10.1523/JNEUROSCI.3258-17.2018>. 13 pp.
- Friederici, A. D. (2017). *Language in our brain: the origins of a uniquely human capacity*. MIT Press. 11 pp.
- Friederici, A. D., & Skeide, M. A. (2015). Neurocognition of language development. In E. L. Bavin & L. R. Naigles (Eds.), *The Cambridge Handbook of Child Language*. Chapter 4, Cambridge: Cambridge University Press, 61-88. <https://doi.org/10.1017/CBO9781316095829.004>. 17 pp.
- Gwilliams, L., King, J. R., Marantz, A., & Poeppel, D. (2022). Neural dynamics of phoneme sequences reveal position-invariant code for content and order. *Nature communications*, 13(1), 6606. <https://doi.org/10.1038/s41467-022-34326-1>. 12 pp.
- Huth, A. G., De Heer, W. A., Griffiths, T. L., Theunissen, F. E., & Gallant, J. L. (2016). Natural speech reveals the semantic maps that tile human cerebral cortex. *Nature*, 532(7600), 453–458. 5 pp.
- Kemmerer, David. (2015). *Cognitive neuroscience of language*. New York and London: Psychology Press. 485 pp.
- Khalighinejad, B., Cruzatto da Silva, G., & Mesgarani, N. (2017). Dynamic Encoding of Acoustic Features in Neural Responses to Continuous Speech. *J Neurosci*, 37(8), 2176-2185. <https://doi.org/10.1523/JNEUROSCI.2383-16.2017>. 8 pp.
- Kutas, M., & Hillyard, S. A. (1984). Brain potentials during reading reflect word expectancy and semantic association. *Nature*, 307(5947), 161-163. <https://doi.org/https://psycnet.apa.org/doi/10.1038/307161a0>. 3 pp.
- Mesgarani, N., Cheung, C., Johnson, K., & Chang, E. F. (2014). Phonetic feature encoding in human superior temporal gyrus. *Science*, 343(6174), 1006-1010. <https://doi.org/10.1126/science.1245994>. 6 pp.
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- Pulvermüller, F., Huss, M., Kherif, F., Moscoso del Prado Martin, F., Hauk, O., & Shtyrov, Y. (2006). Motor cortex maps articulatory features of sounds. *Proceedings of the National Academy of Sciences of the United States of America*, 103, 7865-7870. <https://doi.org/10.1073/pnas.0509989103>. 6 pp.
- Roll, M. (2015). A neurolinguistic study of South Swedish word accents: Electrical brain potentials in nouns and verbs. *Nordic Journal of Linguistics*, 38(2), 149-162. <https://doi.org/10.1017/S0332586515000189>. 12 pp.
- Roll, Mikael, Söderström, Pelle, Frid, Johan, Mannfolk, Peter & Horne, Merle (2017). Forehearing words: Pre-activation of word endings at word onset. *Neuroscience Letters*, 658, 57-61. 4 pp.
- Seikel, J. A., Drumright, D. G., & Hudock, D. J. (2021). *Anatomy & Physiology for Speech, Language, and Hearing, Sixth Edition*. Plural Publishing. 52 pp.
- Tang, Claire, Hamilton, Liberty S., Chang, Edward F. (2017). Intonational speech prosody encoding in the human cortex. *Science*, 357, 797-801. 4 pp.
- Ulanov, M., Kopytin, G., Bermúdez-Margaretto, B., Ntoumanis, I., Gorin, A., Moiseenko, O., ... & Shtyrov, Y. (2024). Regionally specific cortical lateralization of abstract and concrete verb processing: Magnetic mismatch negativity study. *Neuropsychologia*, 195, 108800. 11 pp.

Altogether about 600 pages. Additional material may be distributed in class.

Reference literature

- Belyk, M., & Brown, S. (2014). Perception of affective and linguistic prosody: An ALE meta-analysis of neuroimaging studies. *Social Cognitive and Affective Neuroscience*, 9, 1395–1403. <https://doi.org/10.1093/scan/nst124>
- Chien, P.-J., Friederici, A. D., Hartwigsen, G., & Sammler, D. (2020). Neural correlates of intonation and lexical tone in tonal and non-tonal language speakers. *Human Brain Mapping*, 41, 1842–1858.
- Gandour, J., & Krishnan, A. (2016). Processing Tone Languages. In G. Hickok & S. L. Small (Eds.), *Neurobiology of Language* (pp. 1095–1107). Academic Press. <https://doi.org/10.1016/B978-0-12-407794-2.00087-0>
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- Roll, M. (2022). The predictive function of Swedish word accents. *Frontiers in Psychology*, 13, 1–11. <https://doi.org/10.3389/fpsyg.2022.910787>
- Schirmer, A., & Kotz, S. A. (2006). Beyond the right hemisphere: Brain mechanisms mediating vocal emotional processing. *Trends in Cognitive Sciences*, 10, 24–30. <https://doi.org/10.1016/j.tics.2005.11.009>