# **Spring 2022 Cycle Reading List: Cognitive/Engineering**

## **Core Theory/Review Articles**

Cavanagh, J.F. (2019) Early Career Award 2018: Electrophysiology as a theoretical and methodological hub in the neural sciences. *Psychophysiology, 56*(2)

Craik, F.I.M. (2020). Remembering: An activity of Mind and Brain. *Ann. Rev. Psychol*, 71, 1-24.

Diamond, A. (2013). Executive Functions. *Annual Review of Psychology, 64,* 135-168.

Dunn, J. C., & Kirsner, K. (1988). Discovering functionally independent mental processes: The principle of reversed association. *Psychological Review, 95(1)*, 91 – 101.

Elliot, A. J. & Maier, M. A. (2014). Color psychology: Effects of perceiving color on psychological functioning in humans. *Annual Review of Psychology, 65,* 95-120.

Friederici, A. D. (2012). The cortical language circuit: From auditory perception to sentence comprehension. *Trends in Cognitive Sciences, 16,* 262-268.

Goldinger, S. D. (1998). Echoes of echoes? An episodic theory of lexical access. *Psychological review, 105(2)*, 251.

Goldstone, R. L., & Hendrickson, A. T. (2010). Categorical perception. *Wiley Interdisciplinary*

*Reviews: Cognitive Science, 1(1),* 69-78.

Hoff, K. A. & Bashir, M. (2015). Trust in Automation: Integrating Empirical Evidence on Factors That Influence Trust. *Human Factors, 57,* 407-434.

Hoffman, P., McClelland, J. L., & Lambon Ralph, M. A. (2018). Concepts, control, and context:

A connectionist account of normal and disordered semantic cognition. *Psychological*

*Review,* 125(3), 293.

Karmiloff-Smith, A. (2015). An alternative to domain-general or domain-specific frameworks for theorizing about human evolution and ontogenesis. *AIMS Neuroscience, 2(2),* 91-104. doi: 10.3934/Neuroscience.2015.2.91

Kumaran, D., Hassabis, D., & McClelland, J. L. (2016). What learning systems do intelligent

agents need? Complementary learning systems theory updated. *Trends in cognitive*

*sciences, 20(7),* 512-534.

Laird, J. E., Lebiere, C., & Rosenbloom, P. (2017). A standard model of the mind: Toward a common computational framework across artificial intelligence, cognitive science, neuroscience, and robotics. *AI Magazine, 38(4)*:13.

Martens, S., & Wyble, B. (2010). The attentional blink: Past, present, and future of a blind spot

in perceptual awareness. *Neuroscience & Biobehavioral Reviews, 34(6)*, 947-957.

McDermott (2021). Practicing retrieval facilitates learning. *Ann. Rev. Psychol*, 72, 609-633

Oberauer, Klaus (2009). Design for a Working Memory. *Psychology of Learning and Motivation, 51*:45-100. DOI: https://doi.org/10.1016/S0079-7421(09)51002-X

Ratcliff, R., Smith, P. L., Brown, S. D., & McKoon, G. (2016). Diffusion decision model:

Current issues and history. *Trends in cognitive sciences, 20(4),* 260-281.

Romberg, A. R., & Saffran, J. R. (2010). Statistical learning and language acquisition. *Wiley*

*Interdisciplinary Reviews: Cognitive Science, 1(6),* 906-914.

Recanzone, G. H., & Sutter, M. L. (2008). The biological basis of audition. *Annu. Rev.*

*Psychol., 59*, 119-142.

Sandi, C. (2013). Stress and cognition. *Wiley Interdisciplinary Reviews: Cognitive Science, 4(3)*,

245-261.

Veldre, A., Yu, L., Andrews, S., & Reichle, E. D. (2020, January). Towards a complete model of reading: Simulating lexical decision, word naming, and sentence reading with Über-Reader. In *Proceedings of the 42nd annual conference of the cognitive science society.* Cognitive Science Society.

Wolfe, J. M. (2012). Saved by a log: How do humans perform hybrid visual and memory search?. *Psychological Science, 23(7)*, 698-703.

Wolfe, J. M. (2021). Guided Search 6.0: An updated model of visual search. Psychonomic Bulletin & Review, 28(4), 1060-1092.

Wolfe, J. M., Horowitz, T. S., Van Wert, M. J., Kenner, N. M., Place, S. S., & Kibbi, N. (2007). Low target prevalence is a stubborn source of errors in visual search tasks. *Journal of experimental psychology: General, 136(4)*, 623.

Yarkoni, T. & Westfall, J. (2017). Choosing prediction over explanation in psychology: Lessons from machine learning. *Perspectives on Psychological Science, 12,* 1100-1122.

Young, M. S., Brookhuis, K. A., Wickens, C. D., & Hancock, P. A. (2015). State of science: mental workload in ergonomics. *Ergonomics, 58,* 1 – 17.

## **Spring 2023 Thematic Articles (Theme: The Neural Basis of Individual Differences in Cognitive Abilities)**

Assem, M., Glasser, M. F., Van Essen, D. C., & Duncan, J. (2020). A domain-general cognitive core defined in multimodally parcellated human cortex, *Cerebral Cortex*, 30, 4361–4380.

Barbey, A. K. (2021). *Human intelligence and network neuroscience*. The Cambridge Handbook of Intelligence and Cognitive Neuroscience, 102-122.

Boogert, N. J., Madden, J. R., Morand-Ferron, J., & Thornton, A. (2018). Measuring and understanding individual differences in cognition. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *373*(1756), 20170280.

Burgess, G. C., Braver, T. S., Conway, A. R. A., & Gray, J. R. (2011). Neural mechanisms of interference control underlie the relationship between fluid intelligence and working memory span. *Journal of Experimental Psychology: General*, *140*, 674-692.

Chein, J. M., Moore, A. B., & Conway, A. R. A. (2011). Domain-general mechanisms of complex working memory span. *Neuroimage, 54,* 550-559.

Duncan, J., Assem, M., Shashidhara, S. (2020). Integrated intelligence from distributed brain activity. *Trends in Cognitive Sciences, 24*, 838-852.

Duncan J, Emslie H, Williams P, Johnson R, Freer C (1996)**,** “Intelligence and the frontal lobe:the organization of goal-directed behavior.” *Cognit Psychol* 30(3):257-303

Duncan, J., Seitz, J., Kolodny, J., Bor, D., Herzog, H., Ahmed, A.,…Emslie, H. (2000). A neural basis for general intelligence. *Science, 289*, 457–460.

Duncan, J., & Owen, A. M. (2000). Common regions of the human frontal lobe recruited by diverse cognitive demands. *Trends in Neurosciences, 23(10)*, 475–483.

Fong, A. H. C., Yoo, K., Rosenberg, M. D., Zhang, S., Li, C. S. R., Scheinost, D., ... & Chun, M. M. (2019). Dynamic functional connectivity during task performance and rest predicts individual differences in attention across studies. *NeuroImage*, *188*, 14-25.

Friedman, N. P., & Miyake, A. (2017). Unity and diversity of executive functions: Individual differences as a window on cognitive structure. *Cortex*, *86*, 186-204.

Kane, M. J., & Engle, R. W. (2002). The role of prefrontal cortex in working-memory capacity, executive attention, and general fluid intelligence: An individual-differences perspective. *Psychonomic Bulletin & Review, 9*, 637–671.

Pinner, J.F.L. & Cavanagh, J.F. (2017) Frontal theta accounts for individual differences in the cost of conflict on decision making. *Brain Research, 1672*, 73-80

Schubert, A. L., Löffler, C., Hagemann, D., & Sadus, K. (2022). How robust is the relationship between neural processing speed and cognitive abilities? Psychophysiology, e14165. <https://doi.org/10.1111/psyp.14165>

Soreq, E., Violante, I.R., Daws, R.E., & Hampshire, A. (2021). Neuroimaging evidence for a network sampling theory of individual differences in human intelligence test performance. *Nature Communications, 12,* 2072.