

References

- Albin, R. L., Young, A. B., & Penney, J. B. (1989). The functional anatomy of basal ganglia disorders. *Trends in Neurosciences*, 12, 366–375.
- Alexander, G. E., & Crutcher, M. D. (1990). Functional architecture of basal ganglia circuits: Neural substrates of parallel processing. *Trends Neuroscience*, 13, 266–271.
- Alexander, G. E., DeLong, M. R., & Strick, P. L. (1986). Parallel organization of functionally segregated circuits linking basal ganglia and cortex. *Annual Review of Neuroscience*, 9, 357–381.
- Anonymous (1989). DATATOP: A multicenter controlled clinical trial in early Parkinson's disease. Parkinson study group. *Archives of Neurology*, 46, 1052–1060.
- Bergman, H., Wichmann, T., & DeLong, M. R. (1990). Reversal of experimental parkinsonism by lesions of the subthalamic nucleus. *Science*, 249, 1436–1438.
- Braak, H., Del Tredici, K., Rub, U., de Vos, R. A., Jansen Steur, E. N., & Braak, E. (2003). Staging of brain pathology related to sporadic Parkinson's disease. *Neurobiology of Aging*, 24, 197–211.
- Breakefield, X. O., Blood, A. J., Li, Y., Hallett, M., Hanson, P. I., & Standaert, D. G. (2008). The pathophysiological basis of dystonias. *Nature Reviews Neuroscience*, 9, 222–234.
- Brouillet, E., Conde, F., Beal, M. F., & Hantraye, P. (1999). Replicating Huntington's disease phenotype in experimental animals. *Progress in Neurobiology*, 59, 427–468.
- Chan, C. S., Guzman, J. N., Ilijic, E., Mercer, J. N., Rick, C., Tkatch, T., et al. (2007). 'Rejuvenation' protects neurons in mouse models of Parkinson's disease. *Nature*, 447, 1081–1086.
- Conn, P. J., Battaglia, G., Marino, M. J., & Nicoletti, F. (2005). Metabotropic glutamate

- receptors in the basal ganglia motor circuit. *Nature Reviews Neuroscience*, 6, 787–798.
- DeLong, M. R., & Wichmann, T. (2007). Circuits and circuit disorders of the basal ganglia. *Archives of Neurology*, 64, 20–24.
- Desplats, P., Lee, H. J., Bae, E. J., Patrick, C., Rockenstein, E., Crews, L., et al. (2009). Inclusion formation and neuronal cell death through neuron-to-neuron transmission of alpha-synuclein. *Proceedings of the National Academy of Sciences of the United States of America*, 106, 13010–13015.
- Fernandez-Alvarez, E. (2010). Dystonia. The paediatric perspective. *European Journal of Neurology*, 17(Suppl. 1), 46–51.
- Ferre, S., Lluis, C., Justinova, Z., Quiroz, C., Orru, M., Navarro, G., et al. (2010). Adenosine-cannabinoid receptor interactions. Implications for striatal function. *British Journal of Pharmacology*, 160, 443–453.
- Freed, C. R., Greene, P. E., Breeze, R. E., Tsai, W. Y., DuMouchel, W., Kao, R., et al. (2001). Transplantation of embryonic dopamine neurons for severe Parkinson's disease. *The New England Journal of Medicine*, 344, 710–719.
- Galvan, A., & Wichmann, T. (2007). GABAergic circuits in the basal ganglia and movement disorders. Progress in brain research. *Progress in Brain Research*, 160, 287–312.
- Greenamyre, J. T., Eller, R. V., Zhang, Z., Ovadia, A., Kurlan, R., & Gash, D. M. (1994). Antiparkinsonian effects of remacemide hydrochloride, a glutamate antagonist, in rodent and primate models of Parkinson's disease. *Annals of Neurology*, 35, 655–661.
- H. s. D. C. R. Group (1993). A novel gene containing a trinucleotide repeat that is expanded and unstable on Huntington's disease chromosomes. *Cell*, 72, 971–983.

- Johnson, K. A., Conn, P. J., & Niswender, C. M. (2009). Glutamate receptors as therapeutic targets for Parkinson's disease. *CNS and Neurological Disorders*, 8, 475–491.
- Martella, G., Tassone, A., Sciamanna, G., Platania, P., Cuomo, D., Visconti, M. T., et al. (2009). Impairment of bidirectional synaptic plasticity in the striatum of a mouse model of DYT1 dystonia: Role of endogenous acetylcholine. *Brain: A Journal of Neurology*, 132, 2336–2349.
- McNaught, K. S., Olanow, C. W., Halliwell, B., Isaacson, O., & Jenner, P. (2001). Failure of the ubiquitin–proteasome system in Parkinson's disease. *Nature Reviews Neuroscience*, 2, 589–594.
- Novak, M. J., & Tabrizi, S. J. (2010). Huntington's disease. *BMJ* 340: 34–40. c3109.
- Olanow, C. W., & Prusiner, S. B. (2009). Is Parkinson's disease a prion disorder? *Proceedings of the National Academy of Sciences of the United States of America*, 106, 12571–12572.
- Pisani, A., Bernardi, G., Ding, J., & Surmeier, D. J. (2007). Re-emergence of striatal cholinergic interneurons in movement disorders. *Trends in Neurosciences*, 30, 545–553.
- Polymeropoulos, M. H., Lavedan, C., Leroy, E., Ide, S. E., Dehejia, A., Dutra, A., et al. (1997). Mutation in the alpha-synuclein gene identified in families with Parkinson's disease. *Science*, 276, 2045–2047.
- Pont-Sunyer, C., Martí, M. J., & Tolosa, E. (2010). Focal limb dystonia. *European Journal of Neurology*, 17(Suppl. 1), 22–27.
- Ramaswamy, S., McBride, J. L., & Kordower, J. H. (2007). Animal models of Huntington's disease. *ILAR Journal/National Research Council, Institute of Laboratory Animal Resources*, 48, 356–373.

- Reddy, P. H., Williams, M., & Tagle, D. A. (1999). Recent advances in understanding the pathogenesis of Huntington's disease. *Trends in Neurosciences*, 22, 248–255.
- Reiner, A., Albin, R. L., Anderson, K. D., D'Amato, C. J., Penney, J. B., & Young, A. B. (1988). Differential loss of striatal projection neurons in Huntington disease. *Proceedings of the National Academy of Sciences of the United States of America*, 85, 5733–5737.
- Rice, M. E., & Cragg, S. J. (2008). Dopamine spillover after quantal release: Rethinking dopamine transmission in the nigrostriatal pathway. *Brain Research Reviews*, 58, 303–313.
- Schiffmann, S. N., Fisone, G., Moresco, R., Cunha, R. A., & Ferre, S. (2007). Adenosine A2A receptors and basal ganglia physiology. *Progress in Neurobiology*, 83, 277–292.
- Schmidt, A., & Klein, C. (2010). The role of genes in causing dystonia. *European Journal of Neurology*, 17(Suppl. 1), 65–70.
- Schultz, W. (1998). The phasic reward signal of primate dopamine neurons. *Advances in Pharmacology*, 42, 686–690.
- Schwarcz, R., Guidetti, P., Sathyasaikumar, K. V., & Muchowski, P. J. (2010). Of mice, rats and men: Revisiting the quinolinic acid hypothesis of Huntington's disease. *Progress in Neurobiology*, 90, 230–245.
- Schwarzchild, M. A., Agnati, L., Fuxe, K., Chen, J. F., & Morelli, M. (2006). Targeting adenosine A2A receptors in Parkinson's disease. *Trends in Neurosciences*, 29, 647–654.
- Smith, Y., & Villalba, R. (2008). Striatal and extrastriatal dopamine in the basal ganglia: An overview of its anatomical organization in normal and Parkinsonian brains. *Movement Disorders: Official Journal of the Movement Disorder Society*, 23(Suppl. 3), S534–S547.
- Wichmann, T. (2008). Commentary: Dopaminergic dysfunction in DYT1 dystonia. *Experimental*

Neurology, 212, 242–246.

Wichmann, T., & DeLong, M. R. (2007). Anatomy and physiology of the basal ganglia: Relevance to Parkinson's disease and related disorders. In W Koller & E Melamed (Eds.), *Handbook clinneurol* (pp. 1–18). New York, NY: Elsevier.