

CLNE0004: Motor Systems and Disease

[View Online](#)

[1]

J. E. Krebs, E. S. Goldstein, S. T. Kilpatrick, and B. Lewin, *Lewin's genes X*, International ed. Sudbury, Mass: Jones and Bartlett, 2011. [Online]. Available: <https://app.kortext.com/Shibboleth.sso/Login?entityID=https://shib-idp.ucl.ac.uk/shibboleth&target=https://app.kortext.com/borrow/323975>

[2]

N. W. Wood, *Neurogenetics: a guide for clinicians*. Cambridge: Cambridge University Press, 2012. [Online]. Available: http://ucl.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=2910094060004761&institutionId=4761&customerId=4760

[3]

D. J. Pritchard and B. R. Korf, *Medical genetics at a glance*, 3rd edition. Wiley, 2013. [Online]. Available: <https://bibliu.com/users/saml/samlUCL?RelayState=eyJjdXN0b21fbGF1bmNoX3VyblCl6liMvdmlldy9ib29rcy85Nzg5MTE4Njg5MDE4L2VwdWlvdT0VCUFMvY29udGVudHMuaHRtbCJ9>

[4]

T. R. Robinson and Wiley InterScience (Online service), *Genetics for dummies*, 2nd ed. Hoboken, NJ: Wiley Pub, 2010. [Online]. Available: <http://dx.doi.org/10.1002/9781118269275>

[5]

F. Amthor, *Neuroscience for dummies*. Mississauga, Ont: Wiley, 2012.

[6]

P. Johns, Clinical neuroscience: an illustrated colour text. Edinburgh: Churchill Livingstone, 2014. [Online]. Available: <https://www.clinicalkey.com/student/content/toc/3-s2.0-C20090355117>

[7]

R. F. Kratz, Molecular & cell biology for dummies. Hoboken, NJ: Wiley, 2009.

[8]

B. Alberts et al., Essential cell biology, Fourth edition. New York, NY: Garland Science, 2014.

[9]

R. A. Barker, F. Cicchetti, and E. S. J. Robinson, Neuroanatomy and neuroscience at a glance, Fifth edition. Hoboken, NJ: Wiley Blackwell, 2018. [Online]. Available: <https://bibliu.com/users/saml/samlUCL?RelayState=eyJjdXN0b21fbGF1bmNoX3VybCI6IiMvdmlldy9ib29rcy85NzgxMTE5MTY4NDIzL2VwdWlVT1BTL2Z0b2MuaHRtbCJ9>

[10]

I. B. Levitan and L. K. Kaczmarek, The neuron: cell and molecular biology, Fourth edition. [New York]: Oxford University Press, 2015. [Online]. Available: <http://dx.doi.org/10.1093/med/9780199773893.001.0001>

[11]

E. R. Kandel, J. H. Schwartz, T. M. Jessell, S. Siegelbaum, and A. J. Hudspeth, Eds, Principles of neural science, Fifth edition. New York: McGraw Hill Medical, 2013. [Online]. Available: <https://neurology-mhmedical-com.libproxy.ucl.ac.uk/book.aspx?bookid=1049>

[12]

M. C. Diamond, A. B. Scheibel, and L. M. Elson, The human brain coloring book, 1st ed., vol. 306. New York: Barnes & Noble Books, 1985.

[13]

C. Clarke, R. Howard, M. Rossor, and S. D. Shorvon, Eds, *Neurology: a Queen Square textbook*, Second edition. Chichester, West Sussex, UK: Wiley Blackwell, 2016. [Online]. Available: <https://onlinelibrary.wiley.com/doi/book/10.1002/9781118486160>

[14]

U. Castiello, 'The neuroscience of grasping', *Nature Reviews Neuroscience*, vol. 6, no. 9, pp. 726–736, Sep. 2005, doi: 10.1038/nrn1744.

[15]

M. Davare, A. Kraskov, J. C. Rothwell, and R. N. Lemon, 'Interactions between areas of the cortical grasping network', *Current Opinion in Neurobiology*, vol. 21, no. 4, pp. 565–570, Aug. 2011, doi: 10.1016/j.conb.2011.05.021.

[16]

M. Gerbella, S. Rozzi, and G. Rizzolatti, 'The extended object-grasping network', *Experimental Brain Research*, vol. 235, no. 10, pp. 2903–2916, Oct. 2017, doi: 10.1007/s00221-017-5007-3.

[17]

M. A. Goodale, J. P. Meenan, H. H. Bühlhoff, D. A. Nicolle, K. J. Murphy, and C. I. Racicot, 'Separate neural pathways for the visual analysis of object shape in perception and prehension', *Current Biology*, vol. 4, no. 7, pp. 604–610, Jul. 1994, doi: 10.1016/S0960-9822(00)00132-9.

[18]

S. T. Grafton, 'The cognitive neuroscience of prehension: recent developments', *Experimental Brain Research*, vol. 204, no. 4, pp. 475–491, Aug. 2010, doi: 10.1007/s00221-010-2315-2.

[19]

M. Jeannerod, M. A. Arbib, G. Rizzolatti, and H. Sakata, 'Grasping objects: the cortical mechanisms of visuomotor transformation', *Trends in Neurosciences*, vol. 18, no. 7, pp. 314–320, Jul. 1995, doi: 10.1016/0166-2236(95)93921-J.

[20]

R. S. Johansson and J. R. Flanagan, 'Coding and use of tactile signals from the fingertips in object manipulation tasks', *Nature Reviews Neuroscience*, vol. 10, no. 5, pp. 345–359, May 2009, doi: 10.1038/nrn2621.

[21]

R. N. Lemon, 'Descending Pathways in Motor Control', *Annual Review of Neuroscience*, vol. 31, no. 1, pp. 195–218, Jul. 2008, doi: 10.1146/annurev.neuro.31.060407.125547.

[22]

N. Picard and P. L. Strick, 'Imaging the premotor areas', *Current Opinion in Neurobiology*, vol. 11, no. 6, pp. 663–672, Dec. 2001, doi: 10.1016/S0959-4388(01)00266-5.

[23]

K. A. Jellinger, 'Neuropathology of sporadic Parkinson's disease: Evaluation and changes of concepts', *Movement Disorders*, vol. 27, no. 1, pp. 8–30, Jan. 2012, doi: 10.1002/mds.23795.

[24]

R. Kumaran and M. R. Cookson, 'Pathways to Parkinsonism Redux: convergent pathobiological mechanisms in genetics of Parkinson's disease', *Human Molecular Genetics*, vol. 24, no. R1, pp. R32–R44, Oct. 2015, doi: 10.1093/hmg/ddv236.

[25]

D. J. Surmeier, J. A. Obeso, and G. M. Halliday, 'Selective neuronal vulnerability in Parkinson disease', *Nature Reviews Neuroscience*, vol. 18, no. 2, pp. 101–113, Feb. 2017, doi: 10.1038/nrn.2016.178.

[26]

D. M. Walsh and D. J. Selkoe, 'A critical appraisal of the pathogenic protein spread hypothesis of neurodegeneration', *Nature Reviews Neuroscience*, vol. 17, no. 4, pp. 251–260, Apr. 2016, doi: 10.1038/nrn.2016.13.

[27]

L. Stefanis, ' -Synuclein in Parkinson's Disease', *Cold Spring Harbor Perspectives in Medicine*, vol. 2, no. 2, pp. a009399–a009399, Feb. 2012, doi: 10.1101/cshperspect.a009399.

[28]

J. Burré, 'The Synaptic Function of α -Synuclein', *Journal of Parkinson's Disease*, vol. 5, no. 4, pp. 699–713, Oct. 2015, doi: 10.3233/JPD-150642.

[29]

M. Xilouri, O. R. Brekk, and L. Stefanis, 'Autophagy and Alpha-Synuclein: Relevance to Parkinson's Disease and Related Synucleopathies', *Movement Disorders*, vol. 31, no. 2, pp. 178–192, Feb. 2016, doi: 10.1002/mds.26477.

[30]

B. Dehay, M. Vila, E. Bezdard, P. Brundin, and J. H. Kordower, 'Alpha-synuclein propagation: New insights from animal models', *Movement Disorders*, vol. 31, no. 2, pp. 161–168, Feb. 2016, doi: 10.1002/mds.26370.

[31]

D. A. Roosen and M. R. Cookson, 'LRRK2 at the interface of autophagosomes, endosomes and lysosomes', *Molecular Neurodegeneration*, vol. 11, no. 1, Dec. 2016, doi: 10.1186/s13024-016-0140-1.

[32]

D. M. Wolpert and Z. Ghahramani, 'Computational principles of movement neuroscience', *Nature Neuroscience*, vol. 3, no. Supp, pp. 1212–1217, Nov. 2000, doi: 10.1038/81497.

[33]

K. Friston, J. Mattout, and J. Kilner, 'Action understanding and active inference', *Biological Cybernetics*, vol. 104, no. 1-2, pp. 137-160, Feb. 2011, doi: 10.1007/s00422-011-0424-z.

[34]

K. P. Körding and D. M. Wolpert, 'Bayesian decision theory in sensorimotor control', *Trends in Cognitive Sciences*, vol. 10, no. 7, pp. 319-326, Jul. 2006, doi: 10.1016/j.tics.2006.05.003.

[35]

R. S. Johansson and J. R. Flanagan, 'Sensory control of object manipulation', in *Sensorimotor Control of Grasping*, D. A. Nowak and J. Hermsdorfer, Eds, Cambridge: Cambridge University Press, 2009, pp. 141-160. doi: 10.1017/CBO9780511581267.012.

[36]

F. R. Sarlegna and P. K. Mutha, 'The influence of visual target information on the online control of movements', *Vision Research*, vol. 110, pp. 144-154, May 2015, doi: 10.1016/j.visres.2014.07.001.

[37]

L. S. Jakobson and M. A. Goodale, 'Factors affecting higher-order movement planning: a kinematic analysis of human prehension', *Experimental Brain Research*, vol. 86, no. 1, Aug. 1991, doi: 10.1007/BF00231054.

[38]

R. Balendra and R. Patani, 'Quo vadis motor neuron disease?', *World Journal of Methodology*, vol. 6, no. 1, 2016, doi: 10.5662/wjm.v6.i1.56.

[39]

D. Bäumer, K. Talbot, and M. R. Turner, 'Advances in motor neurone disease', *Journal of the Royal Society of Medicine*, vol. 107, no. 1, pp. 14–21, Jan. 2014, doi: 10.1177/0141076813511451.

[40]

R. N. Lemon, 'Descending Pathways in Motor Control', *Annual Review of Neuroscience*, vol. 31, no. 1, pp. 195–218, Jul. 2008, doi: 10.1146/annurev.neuro.31.060407.125547.

[41]

V. Dietz and T. Sinkjaer, 'Spastic movement disorder: impaired reflex function and altered muscle mechanics', *The Lancet Neurology*, vol. 6, no. 8, pp. 725–733, Aug. 2007, doi: 10.1016/S1474-4422(07)70193-X.

[42]

C. Blackstone, 'Hereditary spastic paraplegia', in *Neurogenetics, Part II*, vol. 148, Elsevier, 2018, pp. 633–652. doi: 10.1016/B978-0-444-64076-5.00041-7.

[43]

C. J. Mathias and S. R. Bannister, Eds, *Autonomic Failure*, vol. 1. Oxford University Press, 2013. doi: 10.1093/med/9780198566342.001.0001.

[44]

V. Iodice, D. A. Low, E. Vichayanrat, and C. J. Mathias, 'Cardiovascular autonomic dysfunction in MSA and Parkinson's disease: Similarities and differences', *Journal of the Neurological Sciences*, vol. 310, no. 1–2, pp. 133–138, Nov. 2011, doi: 10.1016/j.jns.2011.07.014.

[45]

V. Iodice and P. Sandroni, 'Autonomic Neuropathies', *CONTINUUM: Lifelong Learning in Neurology*, vol. 20, pp. 1373–1397, Oct. 2014, doi: 10.1212/01.CON.0000455875.76179.b1.

[46]

Institute of Neurology, Queen Square and National Hospital for Neurology and Neurosurgery (London, England), *Neurology: a Queen Square textbook*, Second edition. Chichester, West Sussex, UK: John Wiley & Sons, Inc, 2016. [Online]. Available: <https://onlinelibrary.wiley.com/doi/book/10.1002/9781118486160>

[47]

'OMIM - Online Mendelian Inheritance in Man'. [Online]. Available: <https://www.omim.org/>

[48]

L. Zrinzo, 'The Role of Imaging in the Surgical Treatment of Movement Disorders', *Neuroimaging Clinics of North America*, vol. 20, no. 1, pp. 125–140, Feb. 2010, doi: 10.1016/j.nic.2009.08.002.

[49]

K. V. Baev, 'A New Conceptual Understanding of Brain Function: Basic Mechanisms of Brain-Initiated Normal and Pathological Behaviors', *Critical ReviewsTM in Neurobiology*, vol. 19, no. 2–3, pp. 119–202, 2007, doi: 10.1615/CritRevNeurobiol.v19.i2-3.30.

[50]

C. D. Marsden and J. A. Obeso, 'The functions of the basal ganglia and the paradox of stereotaxic surgery in Parkinson's disease', *Brain*, vol. 117, no. 4, pp. 877–897, 1994, doi: 10.1093/brain/117.4.877.

[51]

H. Akram et al., 'Connectivity derived thalamic segmentation in deep brain stimulation for tremor', *NeuroImage: Clinical*, vol. 18, pp. 130–142, 2018, doi: 10.1016/j.nicl.2018.01.008.