

# Movement Neuroscience

[View Online](#)

Abernethy, B. (2013). Theme 2: Concept 2. In Biophysical foundations of human movement (3rd ed, pp. 219–239). Human Kinetics.

Bradnam, L. V., Stinear, C. M., Barber, P. A., & Byblow, W. D. (2012). Contralesional Hemisphere Control of the Proximal Paretic Upper Limb following Stroke. *Cerebral Cortex*, 22(11), 2662–2671. <https://doi.org/10.1093/cercor/bhr344>

Byblow, W. D., Carson, R. G., & Goodman, D. (1994). Expressions of asymmetries and anchoring in bimanual coordination. *Human Movement Science*, 13(1), 3–28. [https://doi.org/10.1016/0167-9457\(94\)90027-2](https://doi.org/10.1016/0167-9457(94)90027-2)

Byblow, W. D., Lewis, G. N., Stinear, J. W., Austin, N. J., & Lynch, M. (2000). The subdominant hand increases in the efficacy of voluntary alterations in bimanual coordination. *Experimental Brain Research*, 131. <https://link.springer.com/article/10.1007/s002219900271>

Carson, R., Riek, S., & Byblow, W. (2005). Bilateral interactions between the upper limbs. *Physiology News*, 58, 37–38. <https://www.physoc.org/magazine-articles/bilateral-interactions-between-the-upper-limbs/>

Cathy M. Stinear. (2008). Priming the motor system enhances the effects of upper limb therapy in chronic stroke. *Brain*, 131(5), 1381–1390. <https://brain.oxfordjournals.org/content/131/5/1381>

Cathy M. Stinear. (2012). The PREP algorithm predicts potential for upper limb recovery after stroke. *Brain*, 135(8), 2527–2535. <https://brain.oxfordjournals.org/content/135/8/2527>

Chapter 8: Reflex evaluation. (n.d.). [https://www.dartmouth.edu/~dons/part\\_1/chapter\\_8.html](https://www.dartmouth.edu/~dons/part_1/chapter_8.html)

Coxon, J. P., Stinear, C. M., & Byblow, W. D. (2007). Selective Inhibition of Movement. *Journal of Neurophysiology*, 97(3), 2480–2489. <https://doi.org/10.1152/jn.01284.2006>

Dancause, N., Barbay, S., Frost, S. B., Zoubina, E. V., Plautz, E. J., Mahnken, J. D., & Nudo, R. J. (2006). Effects of Small Ischemic Lesions in the Primary Motor Cortex on Neurophysiological Organization in Ventral Premotor Cortex. *Journal of Neurophysiology*, 96(6), 3506–3511. <https://doi.org/10.1152/jn.00792.2006>

Frost, S. B. (2003). Reorganization of Remote Cortical Regions After Ischemic Brain Injury:

A Potential Substrate for Stroke Recovery. *Journal of Neurophysiology*, 89(6), 3205–3214.  
<https://doi.org/10.1152/jn.01143.2002>

Graziano, M. S. A. (2004). Mapping From Motor Cortex to Biceps and Triceps Altered By Elbow Angle. *Journal of Neurophysiology*, 92(1), 395–407.  
<https://doi.org/10.1152/jn.01241.2003>

Gwyn N. Lewis. (2000). Stride length regulation in Parkinson's disease: the use of extrinsic, visual cues. *Brain*, 123(10), 2077–2090.  
<https://academic.oup.com/brain/article/123/10/2077/352238>

Kandel, E. R., Schwartz, J. H., & Jessell, T. M. (1991). Principles of neural science (3rd ed, pp. 537–543). Elsevier.

Kelso, J. A. S. (1995). Chapter 2: Self-Organisation of Behaviour: The Basic Picture. In Dynamic patterns: the self-organization of brain and behavior (pp. 29–67). MIT Press.  
[https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=49465&am;p;site=ehost-live&scope=site&ebv=EB&ppid=pp\\_29](https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=49465&am;p;site=ehost-live&scope=site&ebv=EB&ppid=pp_29)

Latash, M. L. (1998a). Neurophysiological basis of movement (pp. 43–51). Human Kinetics.

Latash, M. L. (1998b). Neurophysiological basis of movement (pp. 55–61). Human Kinetics.

Latash, M. L. (1998c). Neurophysiological basis of movement (pp. 172–178). Human Kinetics.

Lee, R. G., & Tatton, W. G. (1975). Motor responses to sudden limb displacements in primates with specific CNS lesions and in human patients with motor system disorders.  
<http://journals.cambridge.org.ezproxy.auckland.ac.nz/action/displayAbstract?fromPage=online&aid=9448243&fulltextType=RA&fileId=S0317167100020382>

Magill, R. A. (1993). Vision and catching. In Motor learning: concepts and applications (Fourth edition, pp. 119–122). Brown & Benchmark.

Manoonpong, P., Geng, T., Kulvicius, T., Porr, B., & Wörgötter, F. (2007). Adaptive, Fast Walking in a Biped Robot under Neuronal Control and Learning. *PLoS Computational Biology*, 3(7). <https://doi.org/10.1371/journal.pcbi.0030134>

Matthews, P. B., Farmer, S. F., & Ingram, D. A. (1990). On the localization of the stretch reflex of intrinsic hand muscles in a patient with mirror movements. *The Journal of Physiology*, 428(1), 561–577. <https://doi.org/10.1113/jphysiol.1990.sp018228>

Mills, K. (1995). Impairment of skilled manipulation in patients with lesions of the motor system. In Neural Control of Skilled Human Movement (pp. 75–83). Portland Press.

Morris, M. E., Iansek, R., Summers, J. J., & Matyas, T. A. (1995). Chapter 4 Motor control considerations for the rehabilitation of gait in Parkinson's disease [Electronic resource]. In Motor control and sensory motor integration: issues and directions: Vol. Advances in psychology (pp. 61–93). Elsevier. [https://doi.org/10.1016/S0166-4115\(06\)80007-5](https://doi.org/10.1016/S0166-4115(06)80007-5)

Noth, J., Schwarz, M., Podoll, K., & Motamed, F. (1991). Evidence that low-threshold muscle afferents evoke long-latency stretch reflexes in human hand muscles. <http://jn.physiology.org.ezproxy.auckland.ac.nz/content/65/5/1089>

P. Schwellnus, M., Derman, E. W., & Noakes, T. D. (1997). Aetiology of skeletal muscle 'cramps' during exercise: A novel hypothesis. *Journal of Sports Sciences*, 15(3), 277–285. <https://doi.org/10.1080/026404197367281>

R. J. Nudo. (1996). Reorganization of movement representations in primary motor cortex following focal ischemic infarcts in adult squirrel monkeys. *Journal of Neurophysiology*, 75 (5), 2144–2149. <http://jn.physiology.org/content/jn/75/5/2144.full.pdf>

Reading 1 - Note. (n.d.).

Rothwell, J. C. (1994a). Control of human voluntary movement (2nd ed, pp. 329–339). Chapman & Hall. <https://link.springer.com/9443/book/10.1007/978-94-011-6960-8>

Rothwell, J. C. (1994b). Control of human voluntary movement (2nd ed, pp. 120–123). Chapman & Hall. <https://link.springer.com/book/10.1007/978-1-4684-7688-0>

Rothwell, J. C. (1994c). Control of human voluntary movement (2nd ed, pp. 187–194). Chapman & Hall. <https://link.springer.com/9443/book/10.1007/978-94-011-6960-8>

Rothwell, J. C. (1994d). Control of human voluntary movement (2nd ed, pp. 263–280). Chapman & Hall. <https://link.springer.com/book/10.1007/978-1-4684-7688-0>

Rothwell, J. C. (1994e). Control of human voluntary movement (2nd ed, pp. 286–292). Chapman & Hall. <https://link.springer.com/9443/book/10.1007/978-94-011-6960-8>

Rothwell, J. C. (1994f). Control of human voluntary movement (2nd ed, pp. 24–29). Chapman & Hall. <https://link.springer.com/9443/book/10.1007/978-94-011-6960-8>

Schabrun, S. M., Stinear, C. M., Byblow, W. D., & Ridding, M. C. (2009). Normalizing Motor Cortex Representations in Focal Hand Dystonia. *Cerebral Cortex*, 19(9), 1968–1977. <https://doi.org/10.1093/cercor/bhn224>

Schmidt, R. A. (1982). Motor control and learning: a behavioral emphasis (pp. 335–343). Human Kinetics Publishers.

Schmidt, R. A., & Lee, T. D. (2011). Motor control and learning: a behavioral emphasis (5th ed, pp. 154–156). Human Kinetics.

Schmidt, R. A., & Wrisberg, C. A. (2000). Motor learning and performance (2nd ed, pp. 186–188). Human Kinetics.

Schmidt, R., & Lee, T. (2014). Motor Programs: Motor control of brief actions. In Motor learning and performance: from principles to application (Fifth edition, pp. 107–121). Human Kinetics.

Stinear, C. M. (2004). Impaired Modulation of Intracortical Inhibition in Focal Hand Dystonia. *Cerebral Cortex*, 14(5), 555–561. <https://doi.org/10.1093/cercor/bhh017>

The Descending Tracts - TeachMeAnatomy. (n.d.).  
<http://teachmeanatomy.info/neuro/pathways/descending-tracts-motor/>