

Movement Neuroscience

[View Online](#)

1.

Manoonpong P, Geng T, Kulvicius T, Porr B, Wörgötter F. Adaptive, Fast Walking in a Biped Robot under Neuronal Control and Learning. PLoS Computational Biology. 2007;3(7).

2.

Reading 1 - Note.

3.

Abernethy B. Theme 2: Concept 2. In: Biophysical foundations of human movement. 3rd ed. Champaign, IL: Human Kinetics; 2013. p. 219–39.

4.

Kandel ER, Schwartz JH, Jessell TM. Principles of neural science. 3rd ed. New York: Elsevier; 1991.

5.

The Descending Tracts - TeachMeAnatomy [Internet]. Available from: <http://teachmeanatomy.info/neuro/pathways/descending-tracts-motor/>

6.

Latash ML. Neurophysiological basis of movement. Champaign, IL: Human Kinetics; 1998.

7.

Rothwell JC. Control of human voluntary movement [Internet]. 2nd ed. London: Chapman & Hall; 1994. Available from: <https://link.springer.com/9443/book/10.1007/978-94-011-6960-8>

8.

Carson R, Riek S, Byblow W. Bilateral interactions between the upper limbs. Physiology News [Internet]. 2005;58:37–8. Available from: <https://www.physoc.org/magazine-articles/bilateral-interactions-between-the-upper-limbs/>

9.

Chapter 8: Reflex evaluation [Internet]. Available from: https://www.dartmouth.edu/~dons/part_1/chapter_8.html

10.

Schmidt RA, Lee TD. Motor control and learning: a behavioral emphasis. 5th ed. Champaign, IL: Human Kinetics; 2011.

11.

Rothwell JC. Control of human voluntary movement [Internet]. 2nd ed. London: Chapman & Hall; 1994. Available from: <https://link.springer.com/book/10.1007/978-1-4684-7688-0>

12.

Latash ML. Neurophysiological basis of movement. Champaign, IL: Human Kinetics; 1998.

13.

P. Schwellnus M, Derman EW, Noakes TD. Aetiology of skeletal muscle 'cramps' during exercise: A novel hypothesis. Journal of Sports Sciences [Internet]. 1997 Jan;15(3):277–85. Available from: <https://doi.org/10.1080/026404197367281>

14.

Rothwell JC. Control of human voluntary movement [Internet]. 2nd ed. London: Chapman & Hall; 1994. Available from: <https://link.springer.com:9443/book/10.1007/978-94-011-6960-8>

15.

Rothwell JC. Control of human voluntary movement [Internet]. 2nd ed. London: Chapman & Hall; 1994. Available from: <https://link.springer.com/book/10.1007/978-1-4684-7688-0>

16.

Rothwell JC. Control of human voluntary movement [Internet]. 2nd ed. London: Chapman & Hall; 1994. Available from: <https://link.springer.com:9443/book/10.1007/978-94-011-6960-8>

17.

Mills K. Impairment of skilled manipulation in patients with lesions of the motor system. In: Neural Control of Skilled Human Movement. London: Portland Press; 1995. p. 75-83.

18.

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

19.

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

20.

Matthews PB, Farmer SF, Ingram DA. On the localization of the stretch reflex of intrinsic hand muscles in a patient with mirror movements. *The Journal of Physiology*. 1990 Sep 1;428(1):561-77.

21.

Morris ME, Iansek R, Summers JJ, Matyas TA. Chapter 4 Motor control considerations for the rehabilitation of gait in Parkinson's disease. In: *Motor control and sensory motor integration: issues and directions* [Internet]. Amsterdam: Elsevier; 1995. p. 61-93. Available from: <https://www.sciencedirect.com/science/article/pii/S0166411506800075>

22.

Gwyn N. Lewis. Stride length regulation in Parkinson's disease: the use of extrinsic, visual cues. *Brain* [Internet]. 2000;123(10):2077-90. Available from: <https://academic.oup.com/brain/article/123/10/2077/352238>

23.

Schabrun SM, Stinear CM, Byblow WD, Ridding MC. Normalizing Motor Cortex Representations in Focal Hand Dystonia. *Cerebral Cortex*. 2009 Sep 1;19(9):1968-77.

24.

Stinear CM. Impaired Modulation of Intracortical Inhibition in Focal Hand Dystonia. *Cerebral Cortex*. 2004 Mar 28;14(5):555-61.

25.

Cathy M. Stinear. Priming the motor system enhances the effects of upper limb therapy in chronic stroke. *Brain* [Internet]. 2008;131(5):1381-90. Available from: <https://brain-oxfordjournals.org/content/131/5/1381>

26.

Cathy M. Stinear. The PREP algorithm predicts potential for upper limb recovery after stroke. *Brain* [Internet]. 2012;135(8):2527-35. Available from: <https://brain-oxfordjournals.org/content/135/8/2527>

27.

Rothwell JC. Control of human voluntary movement [Internet]. 2nd ed. London: Chapman & Hall; 1994. Available from:
<https://link.springer.com:9443/book/10.1007/978-94-011-6960-8>

28.

Graziano MSA. Mapping From Motor Cortex to Biceps and Triceps Altered By Elbow Angle. *Journal of Neurophysiology*. 2004 Mar 10;92(1):395–407.

29.

Schmidt R, Lee T. Motor Programs: Motor control of brief actions. In: *Motor learning and performance: from principles to application*. Fifth edition. Champaign, IL: Human Kinetics; 2014. p. 107–21.

30.

Kelso JAS. Chapter 2: Self-Organisation of Behaviour: The Basic Picture. In: *Dynamic patterns: the self-organization of brain and behavior* [Internet]. Cambridge, Mass: MIT Press; 1995. p. 29–67. Available from:
https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=49465&site=ehost-live&scope=site&ebv=EB&ppid=pp_29

31.

Bradnam LV, Stinear CM, Barber PA, Byblow WD. Contralesional Hemisphere Control of the Proximal Paretic Upper Limb following Stroke. *Cerebral Cortex*. 2012 Nov 1;22(11):2662–71.

32.

Latash ML. *Neurophysiological basis of movement*. Champaign, IL: Human Kinetics; 1998.

33.

Byblow WD, Carson RG, Goodman D. Expressions of asymmetries and anchoring in bimanual coordination. *Human Movement Science* [Internet]. 1994 Feb;13(1):3–28.

Available from:

<https://www.sciencedirect.com/science/article/pii/0167945794900272?via%3Dihub>

34.

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

35.

Coxon JP, Stinear CM, Byblow WD. Selective Inhibition of Movement. *Journal of Neurophysiology* [Internet]. 2007 Jan 3;97(3):2480–9. Available from: <https://journals.physiology.org/doi/full/10.1152/jn.01284.2006>

36.

Magill RA. Vision and catching. In: *Motor learning: concepts and applications*. Fourth edition. Madison, Wis: Brown & Benchmark; 1993. p. 119–22.

37.

Schmidt RA. *Motor control and learning: a behavioral emphasis*. Champaign, Ill: Human Kinetics Publishers; 1982.

38.

Schmidt RA, Wrisberg CA. *Motor learning and performance*. 2nd ed. Champaign, IL: Human Kinetics; 2000.

39.

R. J. Nudo. Reorganization of movement representations in primary motor cortex following focal ischemic infarcts in adult squirrel monkeys. *Journal of Neurophysiology* [Internet]. 1996 May 1;75(5):2144–9. Available from: <http://jn.physiology.org/content/jn/75/5/2144.full.pdf>

40.

Frost SB. Reorganization of Remote Cortical Regions After Ischemic Brain Injury: A Potential Substrate for Stroke Recovery. *Journal of Neurophysiology*. 2003 Feb 26;89(6):3205–14.

41.

Dancause N, Barbay S, Frost SB, Zoubina EV, Plautz EJ, Mahnken JD, et al. Effects of Small Ischemic Lesions in the Primary Motor Cortex on Neurophysiological Organization in Ventral Premotor Cortex. *Journal of Neurophysiology* [Internet]. 2006 Aug 9;96(6):3506–11. Available from: <https://journals.physiology.org/doi/full/10.1152/jn.00792.2006>