

PS3141: Clinical and Cognitive Neuroscience

View Online



1.

Passingham RE, Wise SP. The Neurobiology of the Prefrontal Cortex: Anatomy, Evolution, and the Origin of Insight. 1st ed. Oxford University Press; 2012.

2.

Passingham RE, Wise SP. The Neurobiology of the Prefrontal Cortex: Anatomy, Evolution, and the Origin of Insight. Vol Oxford Psychology Series. Oxford University Press; 2012.
<https://ebookcentral.proquest.com/lib/rhul/detail.action?docID=4701018>

3.

Fuster JM. Prefrontal Neurons in Networks of Executive Memory. Brain Research Bulletin. 2000;52(5):331-336. doi:10.1016/S0361-9230(99)00258-0

4.

Fuster JM. The Prefrontal Cortex - An Update: Time Is of the Essence. Neuron. 2001;30(2):319-333. doi:10.1016/S0896-6273(01)00285-9

5.

Fuster JM. Upper Processing Stages of the Perception-action Cycle. Trends in Cognitive Sciences. 2004;8(4):143-145. doi:10.1016/j.tics.2004.02.004

6.

Koechlin E, Ody C, Kouneiher F. The Architecture of Cognitive Control in the Human Prefrontal Cortex. *Science*. 2003;302(5648):1181-1185.
http://www.jstor.org/stable/3835489?seq=1#page_scan_tab_contents

7.

Koechlin E, Summerfield C. An Information Theoretical Approach to Prefrontal Executive Function. *Trends in Cognitive Sciences*. 2007;11(6):229-235.
doi:10.1016/j.tics.2007.04.005

8.

Ramnani N, Owen AM. Anterior Prefrontal Cortex: Insights Into Function From Anatomy and Neuroimaging. *Nature Reviews Neuroscience*. 2004;5(3):184-194. doi:10.1038/nrn1343

9.

Constantinidis C. Coding Specificity in Cortical Microcircuits: A Multiple-Electrode Analysis of Primate Prefrontal Cortex. *Journal of Neuroscience*. 2001;21(10):3646-3655.
<http://www.jneurosci.org/content/21/10/3646.long>

10.

Leon MI, Shadlen MN. Effect of Expected Reward Magnitude on the Response of Neurons in the Dorsolateral Prefrontal Cortex of the Macaque. *Neuron*. 1999;24(2):415-425.
doi:10.1016/S0896-6273(00)80854-5

11.

Quintana J. From Perception to Action: Temporal Integrative Functions of Prefrontal and Parietal Neurons. *Cerebral Cortex*. 1999;9(3):213-221. doi:10.1093/cercor/9.3.213

12.

Sakai K, Rowe JB, Passingham RE. Active Maintenance in Prefrontal Area 46 Creates Distractor-Resistant Memory. *Nature Neuroscience*. 2002;5(5):479-484. doi:10.1038/nn846

13.

Rowe JB, Toni I, Josephs O, Frackowiak RSJ, Passingham RE. The Prefrontal Cortex: Response Selection or Maintenance Within Working Memory? *Science*. 2000;288(5471):1656-1660.
http://www.jstor.org/stable/3075487?seq=1#page_scan_tab_contents

14.

Ramnani N, Passingham RE. Changes in the Human Brain During Rhythm Learning. *Journal of Cognitive Neuroscience*. 2001;13(7):952-966. doi:10.1162/089892901753165863

15.

Passingham RE, Weinberger D, Petrides M. Attention to Action. *Philosophical Transactions: Biological Sciences*. 1996;351(1346):1473-1479.
http://www.jstor.org/stable/3069194?seq=1#page_scan_tab_contents

16.

Jueptner M. Anatomy of Motor Learning. I. Frontal Cortex and Attention to Action. *Journal of Neurophysiology*. 1997;77(3):1313-1324. <http://jn.physiology.org/content/77/3/1313>

17.

Shallice T, Burgess P, Robertson I. The Domain of Supervisory Processes and Temporal Organization of Behaviour [And Discussion]. *Philosophical Transactions: Biological Sciences*. 1996;351(1346):1405-1412.
http://www.jstor.org/stable/3069186?seq=1#page_scan_tab_contents

18.

Miller EK. The Prefrontal Cortex and Cognitive Control. *Nature Reviews Neuroscience*. 2000;1(1):59-65. doi:10.1038/35036228

19.

Miller EK, Freedman DJ, Wallis JD. The Prefrontal Cortex: Categories, Concepts and Cognition. *Philosophical Transactions: Biological Sciences*. 2002;357(1424):1123-1136.

http://www.jstor.org/stable/3066752?seq=1#page_scan_tab_contents

20.

Freedman DJ, Riesenhuber M, Poggio T, Miller EK. Categorical Representation of Visual Stimuli in the Primate Prefrontal Cortex. *Science*. 2001;291(5502):312-316.
http://www.jstor.org/stable/3082349?seq=1#page_scan_tab_contents

21.

Arai Y. Spatial Orientation of Caloric Nystagmus in Semicircular Canal-Plugged Monkeys. *Journal of Neurophysiology*. 2002;88(2):914-928. <http://jn.physiology.org/content/88/2/914>

22.

Freedman DJ. A Comparison of Primate Prefrontal and Inferior Temporal Cortices during Visual Categorization. *Journal of Neuroscience*. 2003;23(12):5235-5246.
<http://www.jneurosci.org/content/23/12/5235.short>

23.

Williams C. The Secret of You. *New Scientist*. 2018;239(3185):36-39.
doi:10.1016/S0262-4079(18)31211-9

24.

Ramnani N. The Primate Cortico-Cerebellar System: Anatomy and Function. *Nature Reviews Neuroscience*. 2006;7(7):511-522. doi:10.1038/nrn1953

25.

Ramnani N. *Cerebellar Learning*. Elsevier Science & Technology; 2014.
<https://moodle.royalholloway.ac.uk/mod/resource/view.php?id=160502>

26.

Ramnani N. Automatic and Controlled Processing in the Corticocerebellar System. In: Ramnani N, ed. *Cerebellar Learning*. Vol Progress in brain research. Elsevier; 2014:255-285. doi:10.1016/B978-0-444-63356-9.00010-8

27.

Strick PL, Dum RP, Fiez JA. Cerebellum and Nonmotor Function. *Annual Review of Neuroscience*. 2009;32(1):413-434. doi:10.1146/annurev.neuro.31.060407.125606

28.

Strick PL, Dum RP, Fiez JA. Cerebellum and Nonmotor Function. *Annual Review of Neuroscience*. 2009;32(1):413-434. doi:10.1146/annurev.neuro.31.060407.125606

29.

Leiner HC, Leiner AL, Dow RS. Cognitive and Language Functions of the Human Cerebellum. *Trends in Neurosciences*. 1993;16(11):444-447. doi:10.1016/0166-2236(93)90072-T

30.

The Cerebellum: Connections, Computations and Cognition. *Trends in Cognitive Sciences*. 1998;2(9). <http://www.sciencedirect.com/science/journal/13646613/2/9>

31.

Kelly RM, Strick PL. Cerebellar Loops with Motor Cortex and Prefrontal Cortex of a Nonhuman Primate. *The Journal of Neuroscience*. 2003;23(23):8432-8444. doi:10.1523/JNEUROSCI.23-23-08432.2003

32.

Middleton FA, Strick PL. Dentate Output Channels: Motor and Cognitive Components. *The Cerebellum: From Structure to Control*. 1997;Progress in Brain Research 114:553-566. doi:10.1016/S0079-6123(08)63386-5

33.

Middleton FA, Strick PL. Anatomical Evidence for Cerebellar and Basal Ganglia Involvement in Higher Cognitive Function. *Science*. 1994;266(5184):458-461.
<https://www.jstor.org/stable/2885336>

34.

Hayter AL, Langdon DW, Ramnani N. Cerebellar Contributions to Working Memory. *NeuroImage*. 2007;36(3):943-954. doi:10.1016/j.neuroimage.2007.03.011

35.

Balsters JH, Cussans E, Diedrichsen J, et al. Evolution of the Cerebellar Cortex: The Selective Expansion of Prefrontal-Projecting Cerebellar Lobules. *NeuroImage*. 2010;49(3):2045-2052. doi:10.1016/j.neuroimage.2009.10.045

36.

Balsters JH, Ramnani N. Symbolic Representations of Action in the Human Cerebellum. *NeuroImage*. 2008;43(2):388-398. doi:10.1016/j.neuroimage.2008.07.010

37.

Balsters JH. Cerebellar Plasticity and the Automation of First-Order Rules. *Journal of Neuroscience*. 2011;31(6):2305-2312. <http://www.jneurosci.org/content/31/6/2305>

38.

Ramnani N. The Evolution of Prefrontal Inputs to the Cortico-pontine System: Diffusion Imaging Evidence from Macaque Monkeys and Humans. *Cerebral Cortex*. 2005;16(6):811-818. doi:10.1093/cercor/bhj024

39.

Ramnani N. Frontal Lobe and Posterior Parietal Contributions to the Cortico-Cerebellar System. *The Cerebellum*. 2012;11(2):366-383. doi:10.1007/s12311-011-0272-3

40.

Balsters JH, Whelan CD, Robertson IH, Ramnani N. Cerebellum and Cognition: Evidence for the Encoding of Higher Order Rules. *Cerebral Cortex*. 2013;23(6):1433-1443. doi:10.1093/cercor/bhs127

41.

O'Reilly JX, Beckmann CF, Tomassini V, Ramnani N, Johansen-Berg H. Distinct and Overlapping Functional Zones in the Cerebellum Defined by Resting State Functional Connectivity. *Cerebral Cortex*. 2010;20(4):953-965. doi:10.1093/cercor/bhp157

42.

Glickstein M, May JG, Mercier BE. Corticopontine Projection in the Macaque: The Distribution of Labelled Cortical Cells After Large Injections of Horseradish Peroxidase in the Pontine Nuclei. *The Journal of Comparative Neurology*. 1985;235(3):343-359. doi:https://doi.org/10.1002/cne.902350306

43.

Glickstein M. What Does the Cerebellum Really Do? *Current Biology*. 2007;17(19):R824-R827. doi:10.1016/j.cub.2007.08.009

44.

Glickstein M. Motor Skills but Not Cognitive Tasks. *Trends in Neurosciences*. 1993;16(11):450-451. doi:10.1016/0166-2236(93)90074-V

45.

Glickstein M, Strata P, Voogd J. Cerebellum: History. *Neuroscience*. 2009;162(3):549-559. doi:10.1016/j.neuroscience.2009.02.054

46.

Allen G, Buxton RB, Wong EC, Courchesne E. Attentional Activation of the Cerebellum Independent of Motor Involvement. *Science*. 1997;275(5308):1940-1943. http://www.jstor.org/stable/2893081?seq=1#page_scan_tab_contents

47.

Stein J. The Magnocellular Theory of Developmental Dyslexia. *Dyslexia*. 2001;7(1):12-36.
doi:10.1002/dys.186

48.

Kirschen MP, Chen SHA, Schraedley-Desmond P, Desmond JE. Load- and Practice-Dependent Increases in Cerebro-Cerebellar Activation in Verbal Working Memory: An fMRI Study. *NeuroImage*. 2005;24(2):462-472. doi:10.1016/j.neuroimage.2004.08.036

49.

Kim SG, Uğurbil K, Strick PL. Activation of a Cerebellar Output Nucleus During Cognitive Processing. *Science*. 1994;265(5174):949-951.
http://www.jstor.org/stable/2884519?seq=1#page_scan_tab_contents

50.

Kirschen MP, Chen SHA, Schraedley-Desmond P, Desmond JE. Load- and Practice-Dependent Increases in Cerebro-Cerebellar Activation in Verbal Working Memory: An fMRI Study. *NeuroImage*. 2005;24(2):462-472. doi:10.1016/j.neuroimage.2004.08.036

51.

Schmahmann J. The Cerebellar Cognitive Affective Syndrome. *Brain*. 1998;121(4):561-579.
doi:10.1093/brain/121.4.561

52.

Budisavljevic S, Ramnani N. Cognitive Deficits From a Cerebellar Tumour: A Historical Case Report From Luria's Laboratory. *Cortex*. 2012;48(1):26-35.
doi:10.1016/j.cortex.2011.07.001

53.

Baron JC, Bousser MG, Comar D, Dequesnoy N, Castaigne P. Crossed Cerebellar Diaschisis: A Remote Functional Suppression Secondary to Supratentorial Infarction in Man. *Journal of Cerebral Bloodflow Medicine*. 1981;1.

54.

Mai JK, Voss T, Paxinos G. 3.1 Surface Views of the Atlas Brain. In: *Atlas of the Human Brain*. 3rd ed. Academic; 2008.

55.

Duvernoy HM, Bourgouin P, Vannson JL. *Human Brain: Surface, Three-Dimensional Sectional Anatomy With MRI, and Blood Supply*. Second, completely revised and enlarged edition. Springer; 1999.

<https://ebookcentral.proquest.com/lib/rhul/detail.action?docID=3099186>

56.

Breedlove SM, Watson NV. General Principles of Sensory Processing, Touch, and Pain. In: *Biological Psychology: An Introduction to Behavioral, Cognitive, and Clinical Neuroscience*. 7th Edition. Sinauer Associates; 2013.

57.

Schieber MH. Constraints on Somatotopic Organization in the Primary Motor Cortex. *Journal of Neurophysiology*. 2001;86(5):2125-2143.

<http://jn.physiology.org/content/86/5/2125>

58.

Pons TP, Garraghty PE, Ommaya AK, Kaas JH, Taub E, Mishkin M. Massive Cortical Reorganization After Sensory Deafferentation in Adult Macaques. *Science*. 1991;252(5014):1857-1860.

http://www.jstor.org/stable/2875886?seq=1#page_scan_tab_contents

59.

Buonomano DV, Merzenich MM. Cortical Plasticity: From Synapses to Maps. *Annual Review of Neuroscience*. 1998;21(1):149-186. doi:10.1146/annurev.neuro.21.1.149

60.

Flor H, Nikolajsen L, Staehelin Jensen T. Phantom Limb Pain: A Case of Maladaptive CNS Plasticity? *Nature Reviews Neuroscience*. 2006;7(11):873-881. doi:10.1038/nrn1991

61.

Farnè A, Roy AC, Giraux P, Dubernard JM, Sirigu A. Face or Hand, Not Both. *Current Biology*. 2002;12(15):1342-1346. doi:10.1016/S0960-9822(02)01018-7

62.

Vargas CD, Aballéa A, Rodrigues ÉC, et al. Re-Emergence of Hand-Muscle Representations in Human Motor Cortex After Hand Allograft. *Proceedings of the National Academy of Sciences of the United States of America*. 2009;106(17):7197-7202. http://www.jstor.org/stable/40483397?seq=1#page_scan_tab_contents

63.

Lotze M. Phantom Movements and Pain an fMRI Study in Upper Limb Amputees. *Brain*. 2001;124(11):2268-2277. doi:10.1093/brain/124.11.2268

64.

Ramachandran V. The Perception of Phantom Limbs. the D. O. Hebb Lecture. *Brain*. 1998;121(9):1603-1630. doi:10.1093/brain/121.9.1603

65.

Harris AJ. Cortical Origin of Pathological Pain. *The Lancet*. 1999;354(9188):1464-1466. doi:10.1016/S0140-6736(99)05003-5

66.

Giroux P, Sirigu A, Schneider F, Dubernard JM. Cortical Reorganization in Motor Cortex After Graft of Both Hands. *Nature Neuroscience*. 2001;4(7):691-692. doi:10.1038/89472

67.

Jain N, Catania KC, Kaas JH. Deactivation and Reactivation of Somatosensory Cortex After Dorsal Spinal Cord Injury. *Nature*. 1997;386(6624):495-498. doi:10.1038/386495a0

68.

Feldman DE, Brecht M. Map Plasticity in Somatosensory Cortex. *Science*. 2005;310(5749):810-815.
http://www.jstor.org/stable/3842754?seq=1#page_scan_tab_contents

69.

Jones EG. Cortical and Subcortical Contributions to Activity-Dependent Plasticity in Primate Somatosensory Cortex. *Annual Review of Neuroscience*. 2000;23(1):1-37.
doi:10.1146/annurev.neuro.23.1.1

70.

Kaas JH, Merzenich MM, Killackey HP. The Reorganization of Somatosensory Cortex Following Peripheral Nerve Damage in Adult and Developing Mammals. *Annual Review of Neuroscience*. 1983;6(1):325-356. doi:10.1146/annurev.ne.06.030183.001545

71.

Engel AK, Singer W. Temporal Binding and the Neural Correlates of Sensory Awareness. *Trends in Cognitive Sciences*. 2001;5(1):16-25. doi:10.1016/S1364-6613(00)01568-0

72.

Fries P. A Mechanism for Cognitive Dynamics: Neuronal Communication Through Neuronal Coherence. *Trends in Cognitive Sciences*. 2005;9(10):474-480.
doi:10.1016/j.tics.2005.08.011

73.

Fries P. Neuronal Gamma-Band Synchronization as a Fundamental Process in Cortical

Computation. Annual Review of Neuroscience. 2009;32(1):209-224.
doi:10.1146/annurev.neuro.051508.135603

74.

Litvak V, Mattout J, Kiebel S, et al. EEG and MEG Data Analysis in SPM8. Computational Intelligence and Neuroscience. 2011;2011:1-32. doi:10.1155/2011/852961

75.

Jenkinson N, Brown P. New Insights Into the Relationship Between Dopamine, Beta Oscillations and Motor Function. Trends in Neurosciences. 2011;34(12):611-618.
doi:10.1016/j.tins.2011.09.003

76.

Tallon-Baudry C. Oscillatory Gamma Activity in Humans and Its Role in Object Representation. Trends in Cognitive Sciences. 1999;3(4):151-162.
doi:10.1016/S1364-6613(99)01299-1

77.

Uhlhaas PJ, Singer W. Abnormal Neural Oscillations and Synchrony in Schizophrenia. Nature Reviews Neuroscience. 2010;11(2):100-113. doi:10.1038/nrn2774

78.

Amplitude, Frequency, and Phase. Published online 2014.
https://www.youtube.com/watch?v=G5_zul5wrTY

79.

Introduction to Brain Waves. Published online 2014.
<https://www.youtube.com/watch?v=LEJdlkc-EDA>

80.

Neurexpert - The EEG and Gamma Oscillations. Published online 2015.
<https://www.youtube.com/watch?v=ZRgX1dH1pf8>

81.

Sleep Basics: Wave Form and Sleep Stages. Published online 2013.
<https://www.youtube.com/watch?v=3vsq8zsF0Kc>

82.

Brain Oscillations: A Video Quick Guide. Published online 2012.
https://www.youtube.com/watch?v=_vQk9isSSSc

83.

Oscillating Neural Network Demonstration. Published online 2015.
https://www.youtube.com/watch?v=bl2aYFv_978

84.

Massachusetts Institute of Technology (MIT) - YouTube.
<http://video.mit.edu/watch/what-harm-does-pathological-synchronization-in-parkinsons-disease-do-9489/>

85.

Wichmann T. Oscillatory Neuronal Activity Patterns in Parkinson's Disease. The Biomedical & Life Sciences Collection. Published online 2014.
<https://hstalks.com/t/2820/oscillatory-neuronal-activity-patterns-in-parkinsons/>

86.

Theta Oscillations and Their Role in Creating Place and Grid Cell Representations | John O'Keefe. Published online 2014. <https://www.youtube.com/watch?v=PcYMA27A14A>

87.

Jan's Interview With Wolf Singer (Full-Length) on Vimeo. Published online 2010.
<https://vimeo.com/11151854>

88.

Fundamentals of Neuronal Oscillations and Synchrony. Published online 2015.
<https://www.youtube.com/watch?v=vwPpSglPJTE>

89.

Fundamentals of Neuronal Oscillations and Synchrony. Published online 2015.
<https://www.youtube.com/watch?v=vwPpSglPJTE>

90.

MEG and Neural Oscillations in ScZ: A Translational Perspective. Published online 2016.
<https://www.youtube.com/watch?v=pRjxU3Kljyl>

91.

Synchronized Neural Oscillations in the Pathophysiology of Schizophrenia. Published online 2008. <https://www.youtube.com/watch?v=Kn3XZRwd9KY>

92.

TSN: Neural Oscillations in Schizophrenia: Perspectives From MEG.
<http://thesciencenetwork.org/programs/rhythmic-dynamics-and-cognition/peter-uhlhaas>

93.

Purves D. Modulation of Movement by the Basal Ganglia. In: Neuroscience. 4th Edition. Sinauer; 2008.

94.

Kringelbach ML, Jenkinson N, Owen SLF, Aziz TZ. Translational Principles of Deep Brain

Stimulation. *Nature Reviews Neuroscience*. 2007;8(8):623-635. doi:10.1038/nrn2196

95.

Gustavsson A, Wittchen HU, Jönsson B, Olesen J. Cost of Disorders of the Brain in Europe 2010. *European Neuropsychopharmacology*. 2011;21(10):718-779. doi:10.1016/j.euroneuro.2011.08.008

96.

Bergman H, Wichmann T, DeLong MR. Reversal of Experimental Parkinsonism by Lesions of the Subthalamic Nucleus. *Science*. 1990;249(4975):1436-1438. http://www.jstor.org/stable/2878195?seq=1#page_scan_tab_contents

97.

Fox SH, Brotchie JM. The MPTP-Lesioned Non-Human Primate Models of Parkinson's Disease. Past, Present, and Future. *Recent Advances in Parkinson's Disease - Translational and Clinical Research*. 2010;Progress in Brain Research 184:133-157. <https://ebookcentral-proquest-com.ezproxy01.rhul.ac.uk/lib/rhul/reader.action?docID=616914&ppg=144>

98.

Wichmann T, DeLong MR. Deep Brain Stimulation for Neurologic and Neuropsychiatric Disorders. *Neuron*. 2006;52(1):197-204. doi:10.1016/j.neuron.2006.09.022

99.

Bezard E, Przedborski S. A Tale on Animal Models of Parkinson's Disease. *Movement Disorders*. 2011;26(6):993-1002. doi:10.1002/mds.23696

100.

Wichmann T, DeLong MR, Guridi J, Obeso JA. Milestones in Research on the Pathophysiology of Parkinson's Disease. *Movement Disorders*. 2011;26(6):1032-1041. doi:10.1002/mds.23695

101.

Blandini F, Armentero MT, Martignoni E. The 6-Hydroxydopamine Model: News from the Past. *Parkinsonism & Related Disorders*. 2008;14:S124-S129.
doi:10.1016/j.parkreldis.2008.04.015

102.

Hauser RA. Levodopa: Past, Present, and Future. *European Neurology*. 2009;62(1):1-8.
doi:10.1159/000215875

103.

Fox SH, Brotchie JM. The MPTP-Lesioned Non-Human Primate Models of Parkinson's Disease. Past, Present, and Future. *Recent Advances in Parkinson's Disease - Translational and Clinical Research*. 2010;Progress in Brain Research 184:133-157.
doi:10.1016/S0079-6123(10)84007-5

104.

Wichmann T, DeLong MR. Deep Brain Stimulation for Neurologic and Neuropsychiatric Disorders. *Neuron*. 2006;52(1):197-204. doi:10.1016/j.neuron.2006.09.022

105.

Langston JW, Ballard P, Tetrud JW, Irwin I. Chronic Parkinsonism in Humans Due to a Product of Meperidine-Analog Synthesis. *Science*. 1983;219(4587):979-980.
http://www.jstor.org/stable/1690734?seq=1#page_scan_tab_contents

106.

Patel NK, Heywood P, O'Sullivan K, McCarter R, Love S, Gill SS. Unilateral Subthalamotomy in the Treatment of Parkinson's Disease. *Brain*. 2003;126(5):1136-1145.
doi:10.1093/brain/awg111

107.

Krack P, Batir A, Van Blercom N, et al. Five-Year Follow-up of Bilateral Stimulation of the Subthalamic Nucleus in Advanced Parkinson's Disease. *New England Journal of Medicine*.

2003;349(20):1925-1934. doi:10.1056/NEJMoa035275

108.

Merola A, Zibetti M, Angrisano S, et al. Parkinson's disease progression at 30 years: a study of subthalamic deep brain-stimulated patients. *Brain*. 2011;134(7):2074-2084. doi:10.1093/brain/awr121

109.

Stem Cell Basics: Introduction [Stem Cell Information].
<https://web-beta.archive.org/web/20121120094520/https://stemcells.nih.gov/info/basics/basics1.asp>

110.

Stem Cells.
https://web.archive.org/web/20221005153032/http://ns.umich.edu/stemcells/022706_TabA.html

111.

Gould E. How Widespread Is Adult Neurogenesis in Mammals? *Nature Reviews Neuroscience*. 2007;8(6):481-488. doi:10.1038/nrn2147

112.

Gross CG. Neurogenesis in the Adult Brain: Death of a Dogma. *Nature Reviews Neuroscience*. 2000;1(1):67-73. doi:10.1038/35036235

113.

Alvarez-Buylla A. Neurogenesis in Adult Subventricular Zone. *Journal of Neuroscience*. 2002;22(3):629-634. <http://www.jneurosci.org/content/22/3/629>

114.

Qiang L, Fujita R, Yamashita T, et al. Directed Conversion of Alzheimer's Disease Patient Skin Fibroblasts into Functional Neurons. *Cell*. 2011;146(3):359-371.
doi:10.1016/j.cell.2011.07.007

115.

Björklund LM, Sánchez-Pernaute R, Chung S, et al. Embryonic Stem Cells Develop Into Functional Dopaminergic Neurons After Transplantation in a Parkinson Rat Model. *Proceedings of the National Academy of Sciences of the United States of America*. 2002;99(4):2344-2349.
http://www.jstor.org/stable/3057967?seq=1#page_scan_tab_contents

116.

Modo M, Stroemer RP, Tang E, Patel S, Hodges H. Effects of Implantation Site of Stem Cell Grafts on Behavioral Recovery From Stroke Damage. *Stroke*. 2002;33(9):2270-2278.
doi:10.1161/01.STR.0000027693.50675.C5

117.

Bliss T, Guzman R, Daadi M, Steinberg GK. Cell Transplantation Therapy for Stroke. *Stroke*. 2007;38(2):817-826. doi:10.1161/01.STR.0000247888.25985.62

118.

Piccini P, Brooks DJ, Björklund A, et al. Dopamine Release From Nigral Transplants Visualized in Vivo in a Parkinson's Patient. *Nature Neuroscience*. 1999;2(12):1137-1140.
doi:10.1038/16060

119.

Gaillard A, Jaber M. Rewiring the Brain With Cell Transplantation in Parkinson's Disease. *Trends in Neurosciences*. 2011;34(3):124-133. doi:10.1016/j.tins.2011.01.003

120.

Gaillard A, Prestoz L, Dumartin B, et al. Reestablishment of Damaged Adult Motor Pathways by Grafted Embryonic Cortical Neurons. *Nature Neuroscience*. 2007;10(10):1294-1299. doi:10.1038/nn1970

121.

Andres RH, Horie N, Slikker W, et al. Human Neural Stem Cells Enhance Structural Plasticity and Axonal Transport in the Ischaemic Brain. *Brain*. 2011;134(6):1777-1789. doi:10.1093/brain/awr094

122.

Brundin P, Barker RA, Parmar M. Neural Grafting in Parkinson's Disease. In: *Recent Advances in Parkinson's Disease - Translational and Clinical Research*. Vol 184. Elsevier; 2010:265-294. doi:10.1016/S0079-6123(10)84014-2

123.

Widner H, Tetrud J, Rehnkrone S, et al. Bilateral Fetal Mesencephalic Grafting in Two Patients With Parkinsonism Induced by 1-Methyl-4-Phenyl-L,2,3,6-Tetrahydropyridine (MPTP). *New England Journal of Medicine*. 1992;327(22):1556-1563. doi:10.1056/NEJM199211263272203

124.

Murphy TH, Corbett D. Plasticity During Stroke Recovery: From Synapse to Behaviour. *Nature Reviews Neuroscience*. 2009;10(12):861-872. doi:10.1038/nrn2735

125.

Krakauer JW. Motor Learning: Its Relevance to Stroke Recovery and Neurorehabilitation. *Current Opinion in Neurology*. 2006;19(1):84-90.

126.

Cramer SC. Repairing the Human Brain After Stroke: I. Mechanisms of Spontaneous Recovery. *Annals of Neurology*. 2008;63(3):272-287. doi:10.1002/ana.21393

127.

Cramer SC, Shah R, Juraneck J, Crafton KR, Le V. Activity in the Peri-Infarct Rim in Relation

to Recovery From Stroke. *Stroke*. 2006;37(1):111-115.
doi:10.1161/01.STR.0000195135.70379.1f

128.

Nudo RJ, Milliken GW. Reorganization of Movement Representations in Primary Motor Cortex Following Focal Ischemic Infarcts in Adult Squirrel Monkeys. *Journal of Neurophysiology*. 1996;75(5):2144-2149. doi:10.1152/jn.1996.75.5.2144

129.

Nudo RJ, Wise BM, SiFuentes F, Milliken GW. Neural Substrates for the Effects of Rehabilitative Training on Motor Recovery After Ischemic Infarct. *Science*. 1996;272(5269):1791-1794.
http://www.jstor.org/stable/2889327?seq=1#page_scan_tab_contents

130.

Nudo RJ. Mechanisms for Recovery of Motor Function Following Cortical Damage. *Current Opinion in Neurobiology*. 2006;16(6):638-644. doi:10.1016/j.conb.2006.10.004

131.

Liepert J, Miltner WHR, Bauder H, et al. Motor Cortex Plasticity During Constraint-Induced Movement Therapy in Stroke Patients. *Neuroscience Letters*. 1998;250(1):5-8.
doi:10.1016/S0304-3940(98)00386-3

132.

Frost SB. Reorganization of Remote Cortical Regions After Ischemic Brain Injury: A Potential Substrate for Stroke Recovery. *Journal of Neurophysiology*. 2003;89(6):3205-3214.
doi:10.1152/jn.01143.2002

133.

Biernaskie J, Chernenko G, Corbett D. Efficacy of Rehabilitative Experience Declines With Time After Focal Ischemic Brain Injury. *Journal Of Neuroscience : The Official Journal Of The Society For Neuroscience*. 2004;24(5):1245-1254.
<https://librarysearch.royalholloway.ac.uk/primo-explore/openurl?Z39.88-2004&rft.jtitl>

e=Journal%20Of%20Neuroscience%20:%20The%20Official%20Journal%20Of%20The%20Society%20For%20Neuroscience&rft.atitle=Efficacy%20of%20Rehabilitative%20Experience%20Declines%20With%20Time%20After%20Focal%20Ischemic%20Brain%20Injury.& rft.volume=24&rft.spage=1245&rft.issn=-&rft.epage=1254&rft.issue=5&rft.date=2004&rft.aufirst=Jeff&rft.aulast=Biernaskie&vid=44ROY_VU2&institution=44ROY&url_ctx_val=&url_ctx_fmt=null&isServicePage=true

134.

Horn SD, DeJong G, Smout RJ, Gassaway J, James R, Conroy B. Stroke Rehabilitation Patients, Practice, and Outcomes: Is Earlier and More Aggressive Therapy Better? Archives of Physical Medicine and Rehabilitation. 2005;86(12):101-114. doi:10.1016/j.apmr.2005.09.016

135.

Salter K, Jutai J, Hartley M, et al. Impact of Early vs Delayed Admission to Rehabilitation on Functional Outcomes in Persons With Stroke. Journal of Rehabilitation Medicine. 2006;38(2):113-117. doi:10.1080/16501970500314350

136.

Lipsanen A, Jolkkonen J. Experimental Approaches to Study Functional Recovery Following Cerebral Ischemia. Cellular and Molecular Life Sciences. 2011;68(18):3007-3017. doi:10.1007/s00018-011-0733-3

137.

McDonald MW, Hayward KS, Rosbergen ICM, Jeffers MS, Corbett D. Is Environmental Enrichment Ready for Clinical Application in Human Post-stroke Rehabilitation? Frontiers in Behavioral Neuroscience. 2018;12. doi:10.3389/fnbeh.2018.00135

138.

Schwartz AB, Cui XT, Weber DJ, Moran DW. Brain-Controlled Interfaces: Movement Restoration with Neural Prosthetics. Neuron. 2006;52(1):205-220. doi:10.1016/j.neuron.2006.09.019

139.

Donoghue JP. Bridging the Brain to the World: A Perspective on Neural Interface Systems. *Neuron*. 2008;60(3):511-521. doi:10.1016/j.neuron.2008.10.037

140.

Merabet LB, Rizzo JF, Amedi A, Somers DC, Pascual-Leone A. Opinion: What Blindness Can Tell Us About Seeing Again: Merging Neuroplasticity and Neuroprostheses. *Nature Reviews Neuroscience*. 2005;6(1):71-77. doi:10.1038/nrn1586

141.

Dagnelie G. Psychophysical Evaluation for Visual Prosthesis. *Annual Review of Biomedical Engineering*. 2008;10(1):339-368. doi:10.1146/annurev.bioeng.10.061807.160529

142.

Nicolelis MAL, Lebedev MA. Principles of Neural Ensemble Physiology Underlying the Operation of Brain-machine Interfaces. *Nature Reviews Neuroscience*. 2009;10(7):530-540. doi:10.1038/nrn2653

143.

O'Doherty JE, Lebedev MA, Ifft PJ, et al. Active Tactile Exploration Using a Brain-Machine-Brain Interface. *Nature*. 2011;479(7372):228-231. doi:10.1038/nature10489

144.

Velliste M, Perel S, Spalding MC, Whitford AS, Schwartz AB. Cortical Control of a Prosthetic Arm for Self-Feeding. *Nature*. 2008;453(7198):1098-1101. doi:10.1038/nature06996

145.

Nicolelis MAL, Wessberg J, Stambaugh CR, et al. Real-Time Prediction of Hand Trajectory by Ensembles of Cortical Neurons in Primates. *Nature*. 2000;408(6810):361-365. doi:10.1038/35042582

146.

Hochberg LR, Serruya MD, Friehs GM, et al. Neuronal Ensemble Control of Prosthetic Devices by a Human With Tetraplegia. *Nature*. 2006;442(7099):164-171.
doi:10.1038/nature04970

147.

Serruya MD, Hatsopoulos NG, Paninski L, Fellows MR, Donoghue JP. Brain-Machine Interface: Instant Neural Control of a Movement Signal. *Nature*. 2002;416(6877):141-142.
doi:10.1038/416141a

148.

Chapin JK, Moxon KA, Markowitz RS, Nicolelis MAL. Real-Time Control of a Robot Arm Using Simultaneously Recorded Neurons in the Motor Cortex. *Nature Neuroscience*. 1999;2(7):664-670. doi:10.1038/10223

149.

Schiller PH, Tehovnik EJ. Visual Prosthesis. *Perception*. 2008;37(10):1529-1559.
doi:10.1068/p6100

150.

Moritz CT, Perlmutter SI, Fetz EE. Direct Control of Paralysed Muscles by Cortical Neurons. *Nature*. 2008;456(7222):639-642. doi:10.1038/nature07418

151.

Dobelle WmH. Artificial Vision for the Blind by Connecting a Television Camera. *ASAIO Journal*. 2000;46(1):3-9.
https://web.archive.org/web/20210605173238/https://journals.lww.com/asaiojournal/fulltext/2000/01000/artificial_vision_for_the_blind_by_connecting_a.2.aspx

152.

Brindley GS, Lewin WS. The Sensations Produced by Electrical Stimulation of the Visual Cortex. *The Journal of Physiology*. 1968;196(2):479-493.
doi:10.1113/jphysiol.1968.sp008519

153.

Merabet LB, Rizzo JF, Amedi A, Somers DC, Pascual-Leone A. Opinion: What Blindness Can Tell Us About Seeing Again: Merging Neuroplasticity and Neuroprostheses. *Nature Reviews Neuroscience*. 2005;6(1):71-77. doi:10.1038/nrn1586

154.

Veraart C, Raftopoulos C, Mortimer JT, et al. Visual Sensations Produced by Optic Nerve Stimulation Using an Implanted Self-Sizing Spiral Cuff Electrode. *Brain Research*. 1998;813(1):181-186. doi:10.1016/S0006-8993(98)00977-9

155.

Breedlove SM. The Chemistry of Behavior. In: *Biological Psychology: An Introduction to Behavioral, Cognitive, and Clinical Neuroscience*. Seventh edition. Sinauer Associates; 2013.

156.

Pierce RC, Kumaresan V. The Mesolimbic Dopamine System: The Final Common Pathway for the Reinforcing Effect of Drugs of Abuse? *Neuroscience & Biobehavioral Reviews*. 2006;30(2):215-238. doi:10.1016/j.neubiorev.2005.04.016

157.

Volkow ND, Wang GJ, Fowler JS, Tomasi D. Addiction Circuitry in the Human Brain. *Annual Review of Pharmacology and Toxicology*. 2012;52(1):321-336.
doi:10.1146/annurev-pharmtox-010611-134625

158.

Schultz W. Getting Formal with Dopamine and Reward. *Neuron*. 2002;36(2):241-263.
doi:10.1016/S0896-6273(02)00967-4

159.

Olds J. Self-Stimulation of the Brain; Its Use to Study Local Effects of Hunger, Sex, and Drugs. *Science*. 1958;127(3294):315-324.
http://www.jstor.org/stable/1754983?seq=1#page_scan_tab_contents

160.

Iversen L. Cannabis and the Brain. *Brain*. 2003;126(6):1252-1270.
doi:10.1093/brain/awg143

161.

Ikemoto S, Wise RA. Mapping of Chemical Trigger Zones for Reward. *Neuropharmacology*. 2004;47:190-201. doi:10.1016/j.neuropharm.2004.07.012

162.

Volkow ND, Wang GJ, Fowler JS, Tomasi D. Addiction Circuitry in the Human Brain. *Annual Review of Pharmacology and Toxicology*. 2012;52(1):321-336.
doi:10.1146/annurev-pharmtox-010611-134625

163.

Nutt DJ, Lingford-Hughes A, Erritzoe D, Stokes PRA. The Dopamine Theory of Addiction: 40 Years of Highs and Lows. *Nature Reviews Neuroscience*. 2015;16(5):305-312.
doi:10.1038/nrn3939

164.

Olds J, Milner P. Positive Reinforcement Produced by Electrical Stimulation of Septal Area and Other Regions of Rat Brain. *Journal of Comparative Psychology*. 1954;(6):419-427.
<http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=1955-06866-001&site=ehost-live>

165.

Di Chiara G, Imperato A. Drugs Abused by Humans Preferentially Increase Synaptic Dopamine Concentrations in the Mesolimbic System of Freely Moving Rats. *Proceedings of the National Academy of Sciences of the United States of America*. 1988;85(14):5274-5278. http://www.jstor.org/stable/32403?seq=1#page_scan_tab_contents

166.

Goldberg SR, Tanda G, Munzar P. Self-Administration Behavior Is Maintained by the Psychoactive Ingredient of Marijuana in Squirrel Monkeys. *Nature Neuroscience*. 2000;3(11):1073-1074. doi:10.1038/80577

167.

Justinova Z, Tanda G, Redhi GH, Goldberg SR. Self-Administration of delta9-Tetrahydrocannabinol (THC) by Drug Naive Squirrel Monkeys. *Psychopharmacology*. 2003;169(2):135-140. doi:10.1007/s00213-003-1484-0

168.

Zangen A. Two Brain Sites for Cannabinoid Reward. *Journal of Neuroscience*. 2006;26(18):4901-4907. <http://www.jneurosci.org/content/26/18/4901>

169.

Volkow ND, Wang GJ, Fowler JS, et al. Reinforcing Effects of Psychostimulants in Humans Are Associated with Increases in Brain Dopamine and Occupancy of D2Receptors. *Journal of Pharmacology and Experimental Therapeutics*. 1999;291(1):409-415. <https://web.archive.org/web/20210517131243/http://jpet.aspetjournals.org/content/291/1/409>

170.

Lingford-Hughes AR, Welch S, Peters L, Nutt DJ. BAP Updated Guidelines: Evidence-Based Guidelines for the Pharmacological Management of Substance Abuse, Harmful Use, Addiction and Comorbidity: Recommendations From BAP. *Journal of Psychopharmacology*. 2012;26(7):899-952. doi:10.1177/0269881112444324

171.

Weinstein AM. Pharmacological Treatment of Cannabis Dependence. *Current pharmaceutical design*. 2011;17(14):1351-1358.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3171994/>