

# ICM6012: Cellular and Molecular Neuroscience

Academic year 2015-2016

View Online



- 
1.  
Nicholls JG. From Neuron to Brain. 5th ed. Sinauer Associates; 2012.
  
  2.  
Nicholls JG. From Neuron to Brain. 4th ed. Sinauer Associates; 2001.
  
  3.  
Kandel ER, Schwartz JH, Jessell TM. Principles of Neural Science. 4th ed. McGraw-Hill, Health Professions Division; 2000.
  
  4.  
Kandel ER, Schwartz JH, Jessell TM. Principles of Neural Science. 4th ed. McGraw-Hill, Health Professions Division; 2000.
  
  5.  
Levitan IB, Kaczmarek LK. The Neuron: Cell and Molecular Biology. 3rd ed. Oxford University Press; 2002.
  
  6.  
Purves D, Augustine, George J, Fitzpatrick D, Hall, William C, LaMantia AS, White, Leonard E. Neuroscience. 5th ed. Sinauer Associates; 2012.

7.

Hille B. Ion Channels of Excitable Membranes. 3rd ed. Sinauer; 2001.

8.

Shepherd GM. The Synaptic Organization of the Brain. 4th ed. Oxford University Press; 1998.

9.

The discovery of the neuron | Mo Costandi.

<https://neurophilosophy.wordpress.com/2006/08/29/the-discovery-of-the-neuron/>

10.

Nociceptive and thermoreceptive lamina I neurons are anatomically distinct.

[http://www.nature.com/neuro/journal/v1/n3/pdf/nn0798\\_218.pdf#page=1&zoom=auto,-73,792](http://www.nature.com/neuro/journal/v1/n3/pdf/nn0798_218.pdf#page=1&zoom=auto,-73,792)

11.

Sabbatini, R.M.E.: Neurons and Synapses: The History.

[http://www.cerebromente.org.br/n17/history/neurons1\\_i.htm](http://www.cerebromente.org.br/n17/history/neurons1_i.htm)

12.

Buhl, Halasy & Somogyi (1994) Diverse sources of hippocampal unitary inhibitory postsynaptic potentials and the number of synaptic release sites. Nature 368: 823-828.

<http://www.nature.com.ezproxy.library.qmul.ac.uk/nature/journal/v368/n6474/pdf/368823a0.pdf>

13.

Nicoll, RA (1994) Cajal's rational psychology. Nature 368: 808 (View on Buhl et al paper).

<http://www.nature.com.ezproxy.library.qmul.ac.uk/nature/journal/v368/n6474/pdf/368808a0.pdf>

14.

Kandel ER, Markram H, Matthews PM, Yuste R, Koch C. Neuroscience thinks big (and collaboratively). *Nature Reviews Neuroscience*. 2013;14(9):659-664. doi:10.1038/nrn3578

15.

A technicolour approach to the connectome.

<http://www.nature.com.ezproxy.library.qmul.ac.uk/nrn/journal/v9/n6/pdf/nrn2391.pdf>

16.

Theodore H. Bullock, Michael V. L. Bennett, Daniel Johnston, Robert Josephson, Eve Marder and R. Douglas Fields. The Neuron Doctrine, Redux. *Science*. 2005;310(5749):791-793.

[http://www.jstor.org.ezproxy.library.qmul.ac.uk/stable/3842746?pq-origsite=summon&amp;seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org.ezproxy.library.qmul.ac.uk/stable/3842746?pq-origsite=summon&amp;seq=1#page_scan_tab_contents)

17.

Targeting glia cells: novel perspectives for the treatment of neuropsychiatric diseases.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3637671/pdf/CN-11-171.pdf>

18.

Integrated Brain Circuits: Astrocytic networks modulate neuronal activity and behavior.

<http://www.annualreviews.org.ezproxy.library.qmul.ac.uk/doi/pdf/10.1146/annurev-physiol-021909-135843>

19.

Nicchitta, Christopher. Endoplasmic Reticulum, Protein Synthesis and Translocation Machinery. *The Endoplasmic Reticulum: Fundamentals and Role in Disease*. Published online 2007. [http://hstalks.com/main/view\\_talk.php?t=97&amp;r=17&amp;c=252](http://hstalks.com/main/view_talk.php?t=97&amp;r=17&amp;c=252)

20.

Byrne JH, Roberts JL. From Molecules to Networks: An Introduction to Cellular and Molecular Neuroscience. 2nd ed. Academic Press/Elsevier; 2009.  
<http://catdir.loc.gov/catdir/toc/ecip0823/2008029618.html>

21.

Role of Axonal Transport in Neurodegenerative Diseases -  
annurev.neuro.31.061307.090711.  
<http://www.annualreviews.org/doi/pdf/10.1146/annurev.neuro.31.061307.090711>

22.

Nicchitta, Christopher. Endoplasmic Reticulum, Protein Synthesis and Translocation Machinery. The Endoplasmic Reticulum: Fundamentals and Role in Disease. Published online 2007. [http://hstalks.com/main/view\\_talk.php?t=97&r=17&c=252](http://hstalks.com/main/view_talk.php?t=97&r=17&c=252)

23.

Synaptic Vesicle Exocytosis.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3225952/pdf/cshperspect-SYP-a005637.pdf>

24.

Axonal transport deficits and neurodegenerative diseases - nrn3380.pdf.  
<http://www.nature.com/nrn/journal/v14/n3/pdf/nrn3380.pdf>

25.

Connor JA, Stevens CF. Prediction of repetitive firing behaviour from voltage clamp data on an isolated neurone soma. The Journal of Physiology. 213(1).  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1331721/>

26.

Baker MD, Chandra SY, Ding Y, Waxman SG, Wood JN. GTP-induced tetrodotoxin-resistant Na<sup>+</sup> current regulates excitability in mouse and rat small diameter sensory neurones. The Journal of Physiology. 2003;548(2):373-382. doi:10.1111/j.1469-7793.2003.00373.x

27.

Nassar MA, Stirling LC, Forlani G, et al. Nociceptor-specific gene deletion reveals a major role for Nav1.7 (PN1) in acute and inflammatory pain. *Proceedings of the National Academy of Sciences*. 2004;101(34):12706-12711. doi:10.1073/pnas.0404915101

28.

Fertleman CR, Baker MD, Parker KA, et al. SCN9A Mutations in Paroxysmal Extreme Pain Disorder: Allelic Variants Underlie Distinct Channel Defects and Phenotypes. *Neuron*. 2006;52(5):767-774. doi:10.1016/j.neuron.2006.10.006

29.

Catterall WA, Yu FH. Painful Channels. *Neuron*. 2006;52(5):743-744. doi:10.1016/j.neuron.2006.11.017

30.

Cox JJ, Reimann F, Nicholas AK, et al. An SCN9A channelopathy causes congenital inability to experience pain. *Nature*. 2006;444(7121):894-898. doi:10.1038/nature05413

31.

O'Keefe J, Dostrovsky J. The hippocampus as a spatial map. Preliminary evidence from unit activity in the freely-moving rat. *Brain Research*. 1971;34(1):171-175. doi:10.1016/0006-8993(71)90358-1

32.

O'Keefe J. Place units in the hippocampus of the freely moving rat. *Experimental Neurology*. 1976;51(1):78-109. doi:10.1016/0014-4886(76)90055-8

33.

Marianne Fyhn, Sturla Molden, Menno P. Witter, Edvard I. Moser and May-Britt Moser. Spatial Representation in the Entorhinal Cortex. *Science*. 2004;305(5688):1258-1264.

[http://ezproxy.library.qmul.ac.uk/login?url=http://www.jstor.org/stable/3837659?pq-origsite=summon&seq=1#page\\_scan\\_tab\\_contents](http://ezproxy.library.qmul.ac.uk/login?url=http://www.jstor.org/stable/3837659?pq-origsite=summon&seq=1#page_scan_tab_contents)

34.

Nakazawa K, McHugh TJ, Wilson MA, Tonegawa S. NMDA receptors, place cells and hippocampal spatial memory. *Nature Reviews Neuroscience*. 2004;5(5):361-372. doi:10.1038/nrn1385

35.

Constitutive and induced neurogenesis in the adult mammalian brain: manipulation of endogenous precursors toward CNS repair. - PubMed - NCBI. <http://www.ncbi.nlm.nih.gov/pubmed/15711054>

36.

Klein C, Fishell G. Neural Stem Cells: Progenitors or Panacea? *Developmental Neuroscience*. 2004;26(2-4):82-92. doi:10.1159/000082129

37.

Richardson WDD, Pringle NP, Yu WP, Hall AC. Origins of Spinal Cord Oligodendrocytes: Possible Developmental and Evolutionary Relationships with Motor Neurons. *Developmental Neuroscience*. 1997;19(1):58-68. doi:10.1159/000111186

38.

Stern CD. Neural induction: old problem, new findings, yet more questions. *Development*. 2005;132(9):2007-2021. doi:10.1242/dev.01794