

# ICM6012: Cellular and Molecular Neuroscience

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[1]

Baker, M.D. et al. 2003. GTP-induced tetrodotoxin-resistant  $\text{Na}^+$  current regulates excitability in mouse and rat small diameter sensory neurones. *The Journal of Physiology*. 548, 2 (Apr. 2003), 373–382. DOI:<https://doi.org/10.1111/j.1469-7793.2003.00373.x>.

[2]

Byrne, J.H. and Roberts, J.L. 2009. From molecules to networks: an introduction to cellular and molecular neuroscience. Academic Press/Elsevier.

[3]

Catterall, W.A. and Yu, F.H. 2006. Painful Channels. *Neuron*. 52, 5 (Dec. 2006), 743–744. DOI:<https://doi.org/10.1016/j.neuron.2006.11.017>.

[4]

Connor, J.A. and Stevens, C.F. Prediction of repetitive firing behaviour from voltage clamp data on an isolated neurone soma. *The Journal of Physiology*. 213, 1.

[5]

Cox, J.J. et al. 2006. An SCN9A channelopathy causes congenital inability to experience pain. *Nature*. 444, 7121 (Dec. 2006), 894–898. DOI:<https://doi.org/10.1038/nature05413>.

[6]

Fertleman, C.R. et al. 2006. SCN9A Mutations in Paroxysmal Extreme Pain Disorder: Allelic Variants Underlie Distinct Channel Defects and Phenotypes. *Neuron*. 52, 5 (Dec. 2006), 767–774. DOI:<https://doi.org/10.1016/j.neuron.2006.10.006>.

[7]

Hille, B. 2001. Ion channels of excitable membranes. Sinauer.

[8]

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>.

[9]

Kandel, E.R. et al. 2013. Neuroscience thinks big (and collaboratively). *Nature Reviews Neuroscience*. 14, 9 (Aug. 2013), 659–664. DOI:<https://doi.org/10.1038/nrn3578>.

[10]

Kandel, E.R. et al. 2000. Principles of neural science. McGraw-Hill, Health Professions Division.

[11]

Kandel, E.R. et al. 2000. Principles of neural science. McGraw-Hill, Health Professions Division.

[12]

Klein, C. and Fishell, G. 2004. Neural Stem Cells: Progenitors or Panacea? *Developmental Neuroscience*. 26, 2–4 (2004), 82–92. DOI:<https://doi.org/10.1159/000082129>.

[13]

Levitin, I.B. and Kaczmarek, L.K. 2002. The neuron: cell and molecular biology. Oxford

University Press.

[14]

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

[15]

Nakazawa, K. et al. 2004. NMDA receptors, place cells and hippocampal spatial memory. *Nature Reviews Neuroscience*. 5, 5 (May 2004), 361–372.  
DOI:<https://doi.org/10.1038/nrn1385>.

[16]

Nassar, M.A. et al. 2004. Nociceptor-specific gene deletion reveals a major role for Nav1.7 (PN1) in acute and inflammatory pain. *Proceedings of the National Academy of Sciences*. 101, 34 (Aug. 2004), 12706–12711. DOI:<https://doi.org/10.1073/pnas.0404915101>.

[17]

Nicchitta, Christopher 2007. Endoplasmic Reticulum, Protein Synthesis and Translocation Machinery. *The Endoplasmic Reticulum: Fundamentals and Role in Disease*. (2007).

[18]

Nicchitta, Christopher 2007. Endoplasmic Reticulum, Protein Synthesis and Translocation Machinery. *The Endoplasmic Reticulum: Fundamentals and Role in Disease*. (2007).

[19]

Nicholls, J.G. 2012. From neuron to brain. Sinauer Associates.

[20]

Nicholls, J.G. 2001. From neuron to brain. Sinauer Associates.

[21]

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).

[22]

O'Keefe, J. 1976. Place units in the hippocampus of the freely moving rat. *Experimental Neurology*. 51, 1 (Jan. 1976), 78–109. DOI:[https://doi.org/10.1016/0014-4886\(76\)90055-8](https://doi.org/10.1016/0014-4886(76)90055-8).

[23]

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

[24]

Purves, D. et al. 2012. *Neuroscience*. Sinauer Associates.

[25]

Richardson, W.D.D. et al. 1997. Origins of Spinal Cord Oligodendrocytes: Possible Developmental and Evolutionary Relationships with Motor Neurons. *Developmental Neuroscience*. 19, 1 (1997), 58–68. DOI:<https://doi.org/10.1159/000111186>.

[26]

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

[27]

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).

[28]

Shepherd, G.M. 1998. The synaptic organization of the brain. Oxford University Press.

[29]

Stern, C.D. 2005. Neural induction: old problem, new findings, yet more questions. Development. 132, 9 (Mar. 2005), 2007–2021. DOI:<https://doi.org/10.1242/dev.01794>.

[30]

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

[31]

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

[32]

A technicolour approach to the connectome.

[33]

Axonal transport deficits and neurodegenerative diseases - nnr3380.pdf.

[34]

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

[35]

Constitutive and induced neurogenesis in the adult mammalian brain: manipulation of endogenous precursors toward CNS repair. - PubMed - NCBI.

[36]

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

[37]

Synaptic Vesicle Exocytosis.

[38]

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