

# INTRODUCTORY READING FOR BIOMEDICAL SCIENCES

Students often ask for reading suggestions, in order to get their minds tuned into some of the topics that will be covered, or to simply provide a more general foundation for University. This list of suggested reading is not an exhaustive one, nor is it a list of material you must read. There are countless good general texts, so do explore: as well as books, read the local and national press, browse for relevant podcasts, websites, lectures, events and museums and exhibitions in your local area. **This is not a list of books you should rush out and buy:**

- First and foremost, read what interests you the most. Each student should, from early on, begin to develop their own particular area of expertise.
- Second, consider what subjects or topics relevant to biomedical sciences you may *not* cover in your A-level studies (or equivalent).

## GENERAL - PREPARATORY

Ashcroft, F. *Life at the Extremes*. Univ California Press, 2002.

Black, J., Boyd, C.A.R. and Noble, D. (editors). *The Logic of Life*. Oxford University Press, 1993.

Calvin, W. H., and Ojamann, G. A. *Conversations with Neil's Brain: The Natural Nature of Thought and Language*. Basic Books, 1995. (also available free of charge from <http://williamcalvin.com/bk7/bk7.htm>)

Dawkins, R. *The Selfish Gene*. Oxford University Press, 2006.

Dawkins, R. (editor). *The Oxford Book of Modern Science Writing*. Oxford University Press, 2009.

De Kruif, P. *Microbe Hunters*. Kessinger Publishing Co, 2005.

Glynn, I. *Elegance in Science*. Oxford University Press, 2010.

Goldacre, B. *Bad Science*. Harper Perennial, 2009. (also see Ben Goldacre's columns for the Guardian at <http://www.guardian.co.uk/profile/bengoldacre>)

Greenfield. S. *The Human Brain: A Guided Tour*. Orion Publishing Group, 1998.

Jones, S. *The Language of the Genes*. Harper Collins (Flamingo), 2000.

Medawar, P. *Advice to a young scientist*. Perseus Books, 1989.

Noble. N. *The Music of Life: Biology beyond the Genome*. Oxford University Press, 2006.

Sacks, O. *The Man who mistook his Wife for a Hat*. Pan Macmillan Picador, 1986.

Sykes, B. *Blood of the Isles*. Corgi Books, 2007.

Wishart, A. *One in Three*. Profile Books, 2007.

## GENERAL - PHYSIOLOGY

Levy, M., Koeppen, B., and Stanton, B. *Berne & Levy Principles of Physiology*. Elsevier, 2009.

Boron, W. & Boulpaep, E. *Medical Physiology*. Elsevier Health Sciences (Saunders), 2008.

## NEUROPHYSIOLOGY

Aidley, D. *The Physiology of Excitable Cells*. Cambridge University Press, 1998.

Bear, M., Connors, B., Paradiso, M. *Neuroscience: Exploring the Brain*. 3<sup>rd</sup> Ed. Lippincot, Williams and Wilkins, 2006.

Kandel, E., Schwartz, J. & Jessell, T. *Principles of Neural Science*. Elsevier, 2000.

## PHARMACOLOGY

Rang, H. et al. *Pharmacology*. Elsevier Health Sciences (Churchill Livingstone), 2007

## BIOCHEMISTRY AND CELL BIOLOGY

Stryer, L. *Biochemistry*. W.H.Freeman & Co Ltd, 2006

Alberts, B. et al. *Molecular Biology of the Cell*, Taylor & Francis (Garland Publishing), 2008.

## STATISTICS

Kirkwood, B. *Essentials of Medical Statistics*. Blackwell Science, 2003.

## SCIENTIFIC THOUGHT

Medawar, P. *Induction and intuition in scientific thought*. Taylor & Francis Routledge, 2008.

Wolpert, L. *The Unnatural Nature of Science*. Faber and Faber, 2000.

Keynes, R & Aidley, D. *Nerve and Muscle*. Cambridge University Press, 2001.

## ONLINE RESOURCES

Start by looking for websites providing information on topics you might be interested in, or read the science sections of newspapers. There are plenty of useful resources out there so do explore.

Here is a list of websites offering podcasts and videos relevant to biomedical sciences:

*Oxford Podcasts*

iTunesU > Oxford University > Medical Sciences or <http://podcasts.ox.ac.uk/>

*BBC Science & Nature*

<http://www.bbc.co.uk/sn/>

*Radio 4 Science & Nature podcasts*

<http://www.bbc.co.uk/radio4/programmes/genres/factual/scienceandnature>

*Horizon (BBC archive)*

<http://www.bbc.co.uk/sn/tvradio/programmes/horizon/broadband/>

*science.tv (Bristol-based group of filmmakers, scientists, educationalists)*

<http://www.science.tv/videos/ben-goldacre-on-homeopathy.html>