

# NS3108: Sensing and Signalling in Biology and Physics

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1.  
Reece, Jane B., Campbell, Neil A.: Biology. Pearson Education, Boston (2011).
  2.  
Brooker, Robert J.: Biology. McGraw-Hill Higher Education, New York (2010).
  3.  
Raven, Peter H., Johnson, George B., Mason, Kenneth A., Losos, Jonathan B., Singer, Susan R.: Biology. McGraw-Hill, New York, NY (2014).
  4.  
Alberts, B.: Molecular biology of the cell (Sixth Edition). Garland Science, Taylor and Francis Group, New York, NY (2015).
  5.  
Lodish, Harvey F.: Molecular cell biology. W.H. Freeman, New York (2013).
  6.  
Cooper, Geoffrey M., Hausman, Robert E.: The cell: a molecular approach. Sinauer Associates, Sunderland, Mass (2013).

7.

Berg, Jeremy M., Tymoczko, John L., Stryer, Lubert: Biochemistry. W. H. Freeman, New York (2011).

8.

Nelson, David L., Cox, Michael M., Lehninger, Albert L.: Lehninger principles of biochemistry. W.H. Freeman, New York, N.Y. (2013).

9.

Murray, Robert K., Harper, Harold A.: Harper's illustrated biochemistry. McGraw-Hill Medical, New York, N.Y. (2009).

10.

Tipler, Paul A., Mosca, Gene P.: Physics for scientists and engineers: with modern physics. W.H. Freeman, New York, NY (2008).

11.

Nelson, Philip Charles: Biological physics: energy, information, life. W.H. Freeman, New York (2008).

12.

Lim, W.A.: Designing customized cell signalling circuits. Nature Reviews Molecular Cell Biology. 11, 393-403 (2010). <https://doi.org/10.1038/nrm2904>.

13.

Scott, J.D., Pawson, T.: Cell Signaling in Space and Time: Where Proteins Come Together and When They're Apart. Science. 326, 1220-1224 (2009). <https://doi.org/10.1126/science.1175668>.

14.

Extracellular Signalling,

<http://www.sumanasinc.com/webcontent/animations/content/extracellularsignaling.html>.

15.

Signaling Pathways: MAPK/Erk in Growth and Differentiation,

[http://www.cellsignal.com/reference/pathway/MAPK\\_ERK\\_Growth.html](http://www.cellsignal.com/reference/pathway/MAPK_ERK_Growth.html).

16.

Pathway Central: ERK Signaling,

[http://www.sabiosciences.com/pathway.php?sn=ERK\\_Signaling](http://www.sabiosciences.com/pathway.php?sn=ERK_Signaling).

17.

Phase velocity - Wikipedia, the free encyclopedia,

[http://en.wikipedia.org/wiki/Phase\\_velocity](http://en.wikipedia.org/wiki/Phase_velocity).

18.

Endres, Robert G.: Physical principles in sensing and signaling: with an introduction to modeling in biology. Oxford University Press, Oxford (2013).

19.

Lim, W., Mayer, B., Pawson, T.: Cell signaling: principles and mechanisms. Garland Science, New York (2015).

20.

Marks, F., Müller-Decker, K., Klingmüller, U.: Cellular signal processing: an introduction to molecular mechanisms of signal transduction. Garland Science, New York (2009).

21.

Liu, B.A., Engelmann, B.W., Nash, P.D.: The language of SH2 domain interactions defines

phosphotyrosine-mediated signal transduction. *FEBS Letters*. 586, 2597–2605 (2012).  
<https://doi.org/10.1016/j.febslet.2012.04.054>.

22.

Calvo, F., Agudo-Ibáñez, L., Crespo, P.: The Ras-ERK pathway: Understanding site-specific signaling provides hope of new anti-tumor therapies. *BioEssays*. 32, 412–421 (2010).  
<https://doi.org/10.1002/bies.200900155>.

23.

Lemmon, M.A., Schlessinger, J.: Cell Signaling by Receptor Tyrosine Kinases. *Cell*. 141, 1117–1134 (2010). <https://doi.org/10.1016/j.cell.2010.06.011>.

24.

Grant, I.S., & Phillips, W.R.: Extracts from Chapter 8 - 8.3 'Impedance and Admittance' to 8.4.1 'Ladder Networks'. In: *Electromagnetism*. Wiley, Chichester (1990).

25.

Grant, I.S., & Phillips, W.R.: Extract from chapter 9 - Transmissions lines. In: *Electromagnetism*. Wiley, Chichester (1990).