

Chapter 1 Corrections – updated 112506

Page 9; Replace problem 1.3.3 by

“1.3.3 What notable discovery did James Watson and Francis Crick make in 1953? What was the role of Rosalind Franklin in this discovery? For those with an interest in these people or topic, three books might be consulted: Watson J. 1968. *The Double Helix*, Scribner; Maddox B. 2002. *The Dark Lady of DNA*, Harper Collins; Ridley M. 2006. *Francis Crick*, Harper Collins.”

Page 19; Replace problem 1.4.10 by the following problem:

“1.4.10 There are two main groups of cells, prokaryotic and eukaryotic. The superficial distinction between these two cell types is that prokaryotic cells do not contain a nucleus. If a prokaryotic cell does not have a nucleus, where is its genetic information stored? (Parisa Saboori, 2006)”

Page 24; Replace the caption “Figure 1.18. Experimental images from chicken embryo cells in culture: light cells are neural retinal cells, dark cells pigmented retinal cells. An initial random mixture of light and dark cells (a) forms dark clusters after about 10 hours (b), and eventually sorts to produce a dark cell core surrounded by light cells after around 72 hours. Reprinted with permission from Alber et al. (2003)” by

“Figure 1.18. Experimental images from chicken embryo cells in culture: light cells are neural retinal cells, dark cells pigmented retinal cells. (a) An initial random mixture of light and dark cells (b) forms dark clusters after about 10 hours, (c) and eventually sorts to produce a dark cell core surrounded by light cells after around 72 hours. Reprinted with permission from Alber et al. (2003)”

Page 28; At the end of the first paragraph of section 1.7, place a period.

Page 33; Figure 1.26: There are two changes in the labels of this figure. First, the rightmost of the two labels on the horizontal axis should be L_{01} and not L_{02} . Second, under the open circle that is itself under the letter “c”, the letter “a” should appear.

Page 36: Figure 1.29: replace the existing figure caption by;

“**Figure 1.29.** An illustration of cell adhesions. Two cells, left and right, are illustrated resting on an extracellular matrix. The cell-to-cell adhesions are illustrated between the cells and also between the cell-to-matrix adhesions on the bottom right. The types of cell adhesions include desmosomes, hemidesmosomes, adherens junctions, tight junctions, gap junctions, and focal adhesions. The adhesive structures are connected to intermediate filaments (desmosomes and hemidesmosomes) or actin filaments

(adherens junctions, tight junctions, and focal adhesions). Modified with permission from <http://herkules oulu.fi/isbn9514271106/html/x369.html>. “