Errata:

p. 82 Entire paragraph starting at line 17. Further work on four-fold networks has shown that this paragraph is overly pessimistic. At the minimum, Eq. (3.57) should be replaced with

$$\beta(K_A + \mu_p)s_o^2 = 4\pi / (\pi^2-8)$$

and the remainder of the paragraph should read:
"Eq. (3.57) is 15% above what is found from simulations of four-fold networks at low temperatures, where spring lengths are relatively constant although the plaquette shape displays strong fluctuations. (Tessier, Boal and Discher, *Phys. Rev.* (2003))."

p. 94 Prob. 3.14. Because of the fixed bond lengths in this simplified model, the area change and pure shear are coupled. Thus, the area compression modulus K_A from the conventional definitions (area fluctuations or change with applied tension) is really the sum $K_A + \mu_p$, where μ_p is the pure shear modulus.

p. 94-95 Prob. 3.15c and 3.16b. For these low symmetry networks, an isotropic stress τ does not produce an isotropic strain. Thus, the area compression modulus defined by the conventional $K_A^{-1}=(\partial A/\partial \tau)/A$ does not correspond to a pure dilation, but rather a mixture of dilation and shear.

p. 181 Eq. (6.15) for $\mathbf{n}_y$ should read

$$\partial_y \mathbf{n} = - \{ ([1+h_y^2]h_{xy} - h_x h_y h_{yy}), ([1+h_x^2]h_{yy} - h_x h_y h_{xy}), (h_x h_{xy} + h_y h_{yy}) \} / (1 + h_x^2 + h_y^2)^{3/2}.$$

p. 182 Third line from the bottom, κ_b/κ_G should be κ_G/κ_b.

p. 188 Eq. (6.51) should read

$$\kappa(\ell) = \kappa_b - (3k_B T/ 4\pi) \ln(\ell/b)$$

where ℓ is the length scale of the undulations.

p. 307 Eq. (9.15c) should read $P_{net} = (b/w)\bullet(1 - b / 2w)\bullet(1 - 2\alpha)$

p. 308 Two lines above Eq. (9.16), the derivative is evaluated in the range $w/b > \alpha$, not $w/b > \alpha b$.

Many thanks to Eva Danielsen, Royal Veterinary and Agricultural University (KVL), Copenhagen Denmark (http:kvl.dk/~eva) for the following:

p. 31 Eq. (2.11): the result on the right-hand side should read $\pi R^4/4$, not

$\pi R^2/4$. The same error occurs on the line above Eq. (2.12): $\pi R_i^2/4$ should be replaced by $\pi R_i^4/4$. Eq. (2.12) is correct.

p. 89 Line 27: in the expression for a free energy change, the term involving the pure shear modulus has been divided by 2 twice. The in-line equation

$$\Delta \mathcal{F} = (K_A/2)\bullet(u_{xx}+u_{yy})^2 + (\mu_p/2)\bullet(u_{xx}-u_{yy})^2/2 + 2\mu_s u_{xy}^{\ 2}$$

should read

$$\Delta \mathcal{F} = (K_A/2)\bullet(u_{xx}+u_{yy})^2 + (\mu_p/2)\bullet(u_{xx}-u_{yy})^2 + 2\mu_s u_{xy}^{\ 2}.$$

p. 107 Eq. (4.13): there is a missing **P** on the right hand side and the equation should read

$$\mathcal{p}_i = \mathcal{P}(x_i, y_i, z_i)\ \Delta x\ \Delta y\ \Delta z.$$

p. 108 Eq. (4.22): the Λ terms on the right hand side should be squared, as they are in Eq. (4.21). The equation should read

$$\Delta F = (k_B Tn/2)\bullet(\Lambda_x^{\ 2} + \Lambda_y^{\ 2} + \Lambda_z^{\ 2} - 3).$$

p. 164 Eq. (5.30) and Fig. (5.21): the expression for the hole radius R^* which maximizes ΔH has been inverted; the radius R^* should be given by

$$R^* = \lambda / \tau.$$

p. 168 Line 21: the in-line equation $\lambda^* \sim k_A T / b$ should read

$$\lambda^* \sim k_B T / b.$$

p. 225 Line 11 from bottom: the reference to Miao et al., 1974 should be Miao et al., 1994.

p. 242 Prob. 7.7: for a less extreme example of cell wall strain, choose a diameter of 1 micron supporting a pressure of 5 atmospheres.

p. 285 Prob. 8.8. The total area of the vesicle should be 200 μm^2, not 100 μm^2.