

Corrections

Säily, V. Matti J., Samppa J. Ryhänen, Juha M. Holopainen, Stefano Borocci, Giovanna Mancini, and Paavo K. J. Kinnunen. 2001. Characterization of mixed monolayers of phosphatidylcholine and a dicationic gemini surfactant SS-1 with a Langmuir balance: effects of DNA. *Biophys. J.* 81:2135–2143.

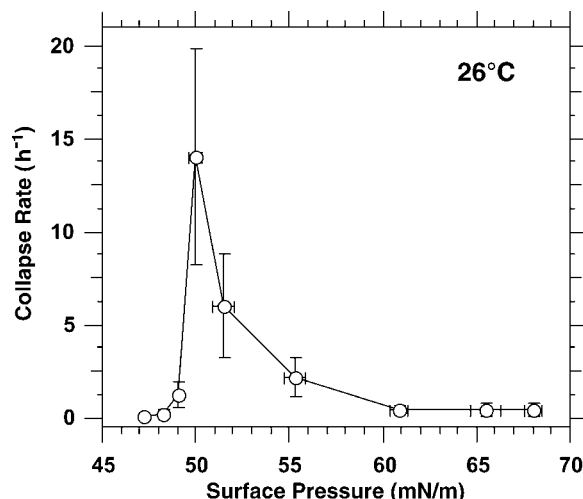
Ryhänen, Samppa J., Matti J. Säily, Tommi Pauku, Stefano Borocci, Giovanna Mancini, Juha M. Holopainen, and Paavo K. J. Kinnunen. 2003. Surface charge density determines the efficiency of cationic gemini surfactant based lipofection. *Biophys. J.* 84:578–587.

It has become evident that instead of the desired dicationic gemini surfactant, viz. (2S,3R)-2,3-dimethoxy-1,4-bis(*N*-hexadecyl-*N,N*-dimethylammonium)butane dibromide (abbreviated as SS-1 in the first article and SR-1 in the second) the synthesis described by G. Cerichelli, L. Luchetti, and G. Mancini (*Tetrahedron*. 1996. 52:2465–2470) yields a stoichiometric mixture of the cationic surfactant *N,N*-dimethyl-*N,N*-dihexadecyl ammonium bromide (abbreviated as DHAB) and *N,N*-dimethyl-3, 4-dimethylpyrrolidinium bromide. The error was due to the NMR spectrum and the elemental analysis of this mixture being indistinguishable from that of the gemini surfactant. The combined molecular weight of this mixture is the same as for the gemini surfactant. Accordingly, the concentrations and the mole fractions of the lipids and surfactants in the model membranes are correct in both articles. As expected, the water soluble pyrrole has no influence on the thermal phase behavior of DHAB (S. J. Ryhänen, J. I. Älakoskela, and P. K. J. Kinnunen, *Langmuir*, in press). Importantly, our conclusions about the critical role of surface charge density in the organization of bilayers and monolayers, as well as the impact of this parameter on interaction of cationic lipid containing membranes with DNA and on transfection efficiency, remain valid. Yet, since DHAB bears a single positive charge instead of two used in the calculations for the gemini, following corrections to the CL/DNA and DNA/CL charge ratios need to be made: The DNA/CL charge ratios reported in the first study (Säily et al., 2001) are twice the values given. *E.g.*, in the Abstract, the DNA/CL charge ratio is 2.5 instead of 1.25. In the second study, CL/DNA ratios were used and, accordingly, these are half of the value stated. In Fig. 2 (Ryhänen et al., 2003), for instance, the CL/DNA ratios are 0.25, 0.5, 1.0, and 1.5, instead of 0.5, 1.0, 2.0, and 3.0. We do apologize for the inconvenience this error may have caused to the readers of the *Biophysical Journal*.

doi: 10.1529/biophysj.105.900117

Smith, E. C., J. M. Crane, T. G. Laderas, and S. B. Hall. 2003. Metastability of a supercompressed fluid monolayer. *Biophys. J.* 85:3048–3057.

On pages 3052–3053, Fig. 5 A and related text state measurements of collapse rates at 26°C incorrectly. The figure should be:



The text on page 3053, paragraph 2, sentence 4 should read:

From its peak value of $14.1 \pm 5.9 \text{ h}^{-1}$, collapse slowed to $0.42 \pm 0.32 \text{ h}^{-1}$ at 68 mN/m (Fig. 5 A).

Paragraph 3, sentence 4 should read: The maximum rate of $127 \pm 76 \text{ h}^{-1}$ was one order of magnitude greater, ...

doi: 10.1529/biophysj.105.900118