Supplementary Material

for the manuscript

”**Formation of lipid/peptide tubules by IAPP and temporin B on supported lipid membranes**”

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Movie 1. Live confocal imaging of a helical membrane tubule attached only from one end to the membrane surface. The image sequence depicts morphological transformations of supported bilayer approx. 21 h after the addition of 0.4 μM IAPP. Lipid composition of the bilayer was SOPC/PazePC/BODIPY-PC, 80:20:0.5 (mol/mol). In the middle of the frame a lipid tubule can be seen with its loose end twisted into a helix and moving freely in the bulk aqueous phase above the SLB. Laser excitation and filters were for BODIPY fluorescence.

Fig. S1. Representative images depicting remodelling of supported lipid bilayers induced by temporin B and rat IAPP. Images of straight membrane tubules under tension were obtained (a) approx. 20 h after the addition of temporin B and (b) approx. 23 h after the addition of rIAPP onto a bilayer composed of SOPC/BODIPY-PC, 100:0.5 (mol/mol). Final nominal peptide concentration added to the aqueous phase above the bilayers was 0.4 μM. Laser excitation and filters were selected for BODIPY fluorescence.

Fig. S2. Helical lipid/peptide tubule formed on supported POPC bilayer. Occasionally, similar helical structures seen to form on SOPC/PazePC SLBs were observed also for neat POPC membranes following interaction with IAPP. Image shows a helical tubule (*arrow*) observed 23 h after the addition of 0.4 μM IAPP to the aqueous phase over supported POPC/BODIPY-PC (100:0.5 mol/mol) bilayer. Laser excitation and filters were as appropriate for BODIPY fluorescence.