Supporting Information

Freely drawn single lipid nanotube patterns

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Figure S1: Lipid nanotubes assembled on PEI

Figure S1 shows a typical fluorescent image of LNTs assembled on PEI surfaces (mother LNTs). All the LNTs in SI consist of DOPE and 0.5 % Liss Rhodamine-PE as the ones described in the main text.



Figure S2: LNT assembly on (PEI/PSS)_{*n*}PEI.

Figure S2 shows fluorescent images of LNTs formed on $(PEI/PSS)_n PEI$ (bilayer number n = 5, 10, 15, 20). Note that the difference in the density of the LNTs is due to the random flow induced by a pipette.



Figure S3: Fluorescence recovery after photo bleaching (FRAP) of daughter LNTs.

Figure S3 shows fluorescence recovery after photobleaching of a created LNT object. The recovery suggests the fluidity of the daughter LNTs and the continuous connection to the mother LNT.



Figure S4: Lifetime of the created LNT objects

Figure S4 shows a fluorescent image of a single LNT object 6 days after it was drawn (the same sample as Figure 5B in the main text).