Supplementary Data

Aerosol–Cell Exposure System Applied to Semi-Adherent Cells for Aerosolization of Lung Surfactant and Nanoparticles Followed by High Quality RNA Extraction

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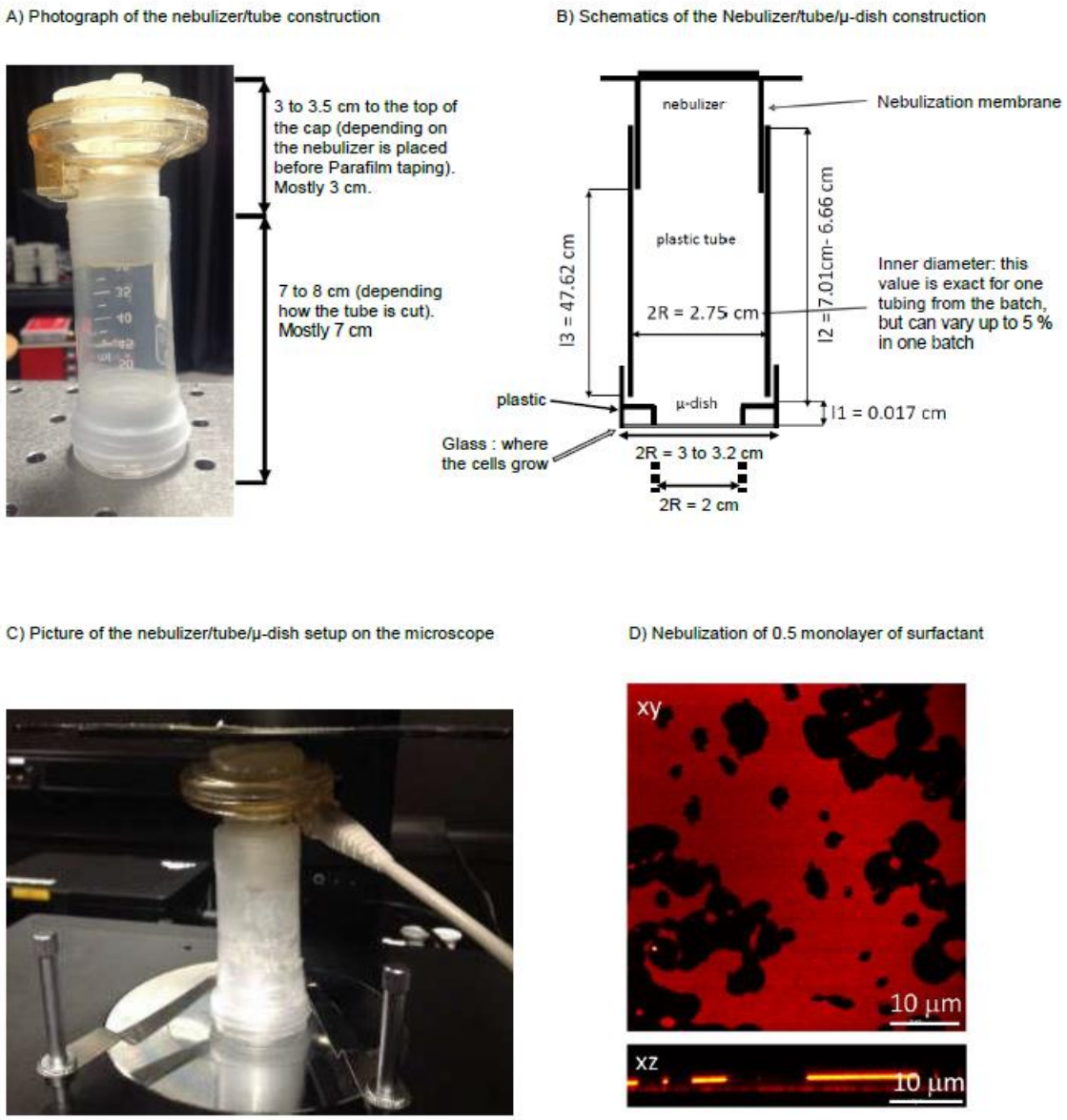

Figure S1: Nebulizer/tube/µ-dish setup for microscopy.

The estimation of the fraction of nebulized surfactant which reaches the sample was performed by nebulizing 12 µg of surfactant (100 µL of 0.12 µg/mL surfactant), resulting in approximately 0.5 monolayers of surfactant on the sample (red area on Supp Data 1D). Considering that a lipid monolayer has a surface area of 500 m_2/g and the surface of the sample was 3.5 cm_2, the mass of the 0.5 monolayer deposited on the sample was 0.3 µg. This estimation was used to determine the amount of surfactant nebulized in other experiments as well.

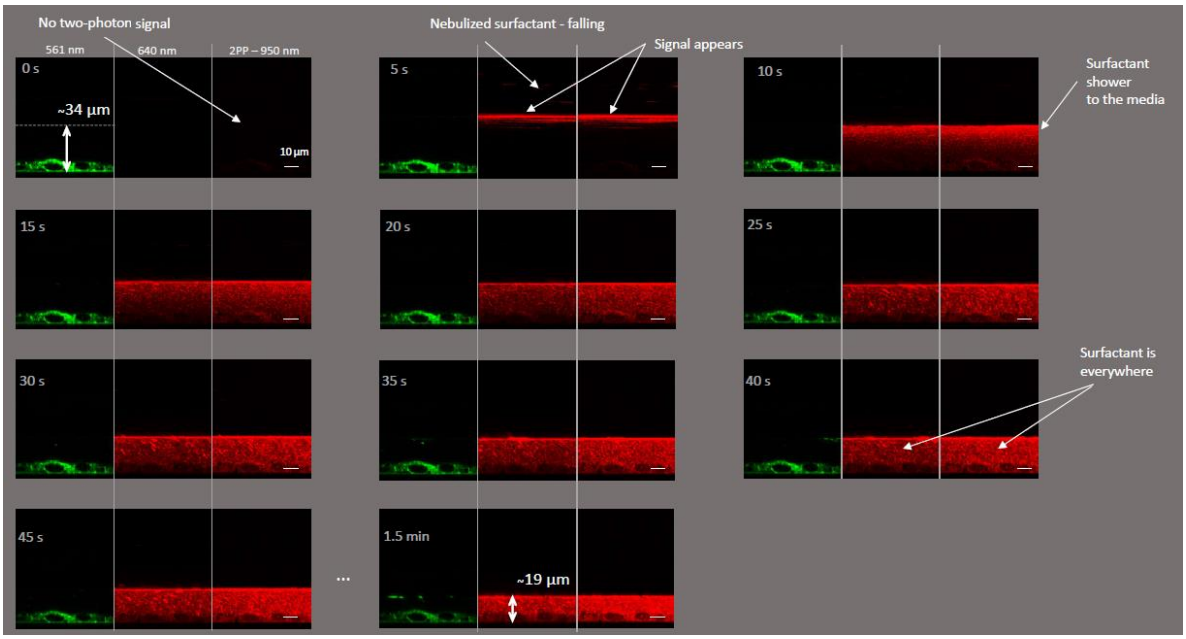

Figure S2: Time series of nebulizing Curosurf-StarRed, fluorescence microscopy at 561 nm, 640, and 950 nm. Most of the material is nebulized in the first 30 s, and the system settles in a few minutes;

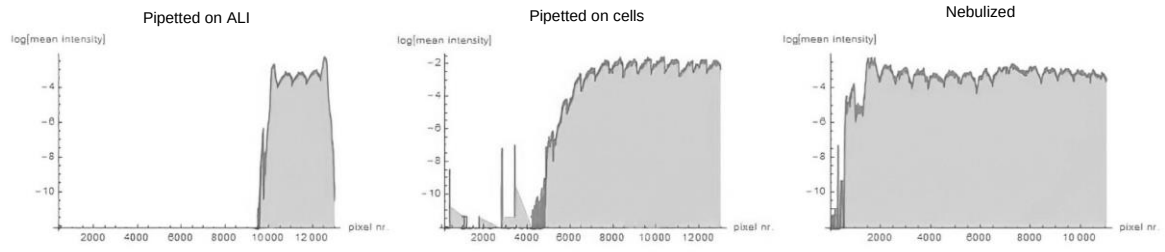

Figure S3: Intensity distribution of Curosurf-StarRed fluorescence, under different conditions