Robust Reagent Addition and Perfusion Strategies for Droplet-Interface Bilayers

Max Lein, ‡^{*a*} Jing Huang ‡^{*a*} and Matthew A. Holden*^{*a*}

Received (in XXX, XXX) Xth XXXXXXXX 20XX, Accepted Xth XXXXXXXX 20XX DOI: 10.1039/b000000x

Electronic Supplementary Information



Figure S1: Diagram of the add-chip. The two halves are separated by a Teflon film with an aperture between the small bath and the movable droplet.



Figure S2: View from top, approximately 20° from normal, prior to DIB formation. Slight bending in the Teflon film at the top of the device is normal and does not affect DIB formation.



Figure S3: Demonstration of the add-chip before and after reagent addition. a) A bilayer has formed between the 200nL droplet and well. A 200 nL droplet of dye was suspended from the ball-ended silver wire, ready to add. b) Immediately after dye solution was added to the well. c) The wire was removed without perturbing the DIB. The wire can be re-loaded or replaced and used for another reagent addition.



Figure S4: Flow-chip with assembled DIB. Here, the device is viewed at an angle approximately 45° from the axis of the glass capillary.