SUPPORTING INFORMATION

Adaptive Use of Bubble Wrap for Storing Liquid Samples and Performing Analytical Assays

David K. Bwambok^{1†}, Dionysios C. Christodouleas^{1†}, Stephen A. Morin¹, Heiko Lange¹, Scott T. Phillips¹, and George M. Whitesides^{1,2,3,*}

¹Department of Chemistry & Chemical Biology, Harvard University,

12 Oxford Street, Cambridge, MA 02138

²Wyss Institute for Biologically Inspired Engineering, Harvard University,

³Kavli Institute for Bionano Science & Technology, Harvard University, 29 Oxford Street Cambridge, MA 02138

60 Oxford Street, Cambridge, MA 02138

†Both authors contributed equally to this work *Corresponding author E-mail: gwhitesides@gmwgroup.harvard.edu

Contents

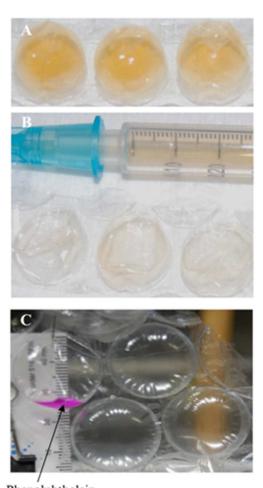
Figure S-1. Filling a bubble with a diameter 2.5 cm with an aqueous solution of rhodamine B using a plastic pipette tip.

Figure S-2. Bubbles after exposure to nitrogen dioxide gas showing brown color (A) inside unpunctured bubbles that were initially empty, and (B) in the syringe used to draw the gas from the bubbles. The deflated bubbles remain slightly brown. (C) Picture showing swollen bubbles after exposure to ammonia gas for 30 minutes, and that the phenolphthalein indicator turned purple when injected into the swollen bubbles.

Figure S-3. Stereomicroscopic image of adult *C. elegans* in the bubble after four days. The image on the right side is an expansion of the image on the left (section marked by the red rectangular box), showing the worms in more detail.



Figure S-1. Filling a bubble with a diameter 2.5 cm with an aqueous solution of rhodamine B using a plastic pipette tip.



Phenolphthalein

Figure S-2. Bubbles after exposure to nitrogen dioxide gas showing brown color (A) inside unpunctured bubbles that were initially empty, and (B) in the syringe used to draw the gas from the bubbles. The deflated bubbles remain slightly brown. (C) Picture showing swollen bubbles after exposure to ammonia gas for 30 minutes, and that the phenolphthalein indicator turned purple when injected into the swollen bubbles.

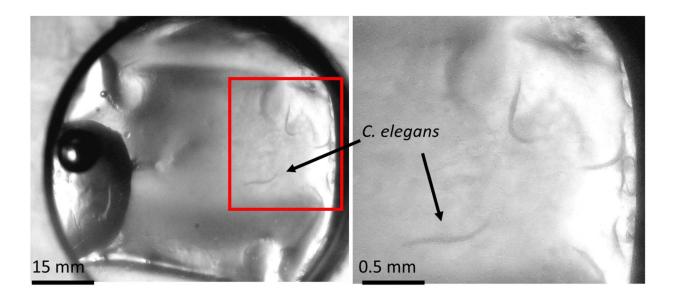


Figure S-3. Stereomicroscopic image of adult *C. elegans* in the bubble after four days. The image on the right side is an expansion of the image on the left (section marked by the red rectangular box), showing the worms in more detail.