

Electronic Supplementary Materials

Exploring Locked Nucleic Acids as a Bioinspired Materials Assembly and Disassembly Tool

Ngozi A. Eze*^a and Valeria Tohver Milam^{a,b,c}

^a School of Materials Science and Engineering, Georgia Institute of Technology, 771 Ferst Drive NW, Atlanta, GA, USA 30032

^b Wallace H. Coulter Department of Biomedical Engineering, Georgia Institute of Technology, 901 Atlantic Drive NW, Atlanta, GA, USA 30032

^c Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, 901 Atlantic Drive NW, Atlanta, GA, USA 30032

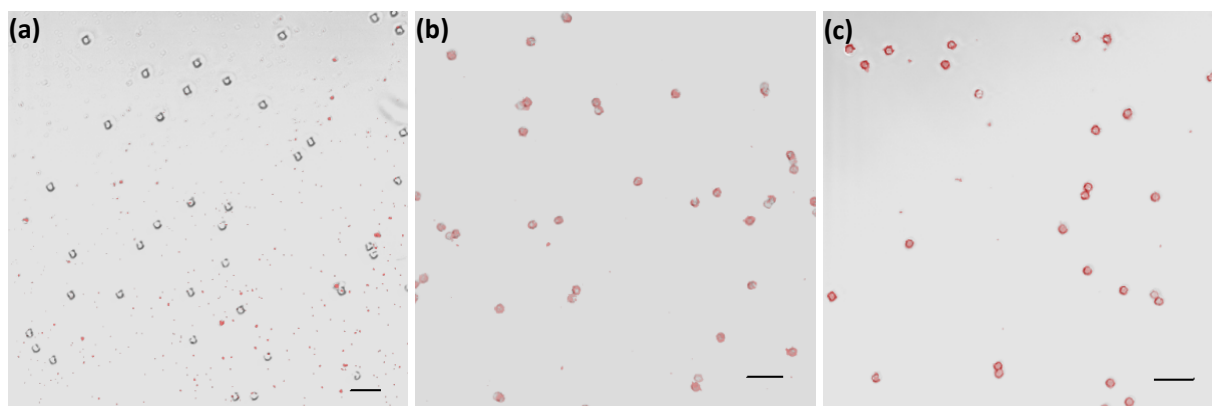


Figure S1. Confocal micrographs of colloidal satellite assemblies formed between nonfluorescent microspheres functionalized with L^3A20 probe strands and fluorescent 200 nm particles functionalized with (a) L^3A20 , (b) L^3M9 , or (c) L^3B9 target strands. Images are 3D compilations (DIC + fluorescence modes) of vertical z-stack micrographs taken from the same fields of view as Figure 5. Scale bars are 5 μm .

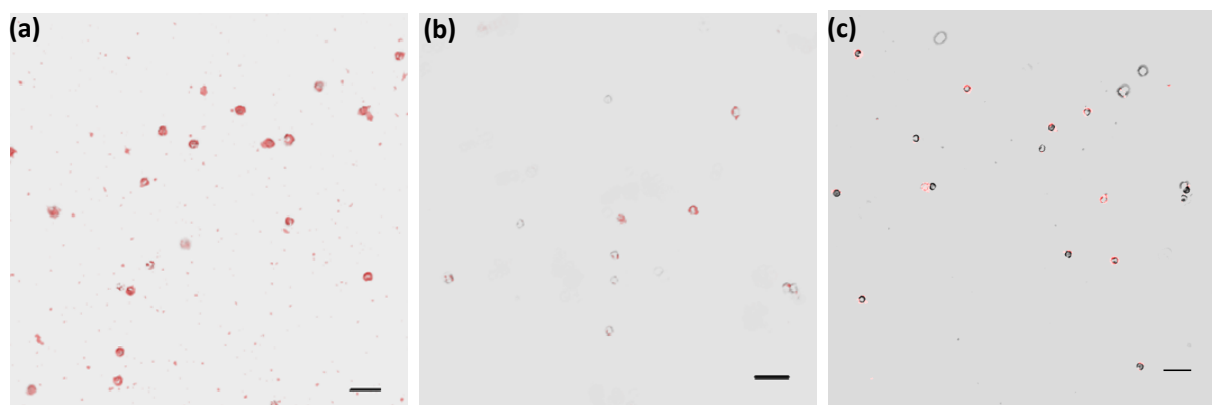


Figure S2. Confocal micrographs of suspensions of LNA-linked ($L^3A20:L^3B9$) colloidal satellite assemblies following a 24 h incubation at 37 °C with (a) NC14, (b) B15, or (c) L^3B15 secondary targets. Images are 3D compilations (DIC + fluorescence modes) of vertical z-stack micrographs taken from the same fields of view as Figure 6. Scale bars are 5 μm .

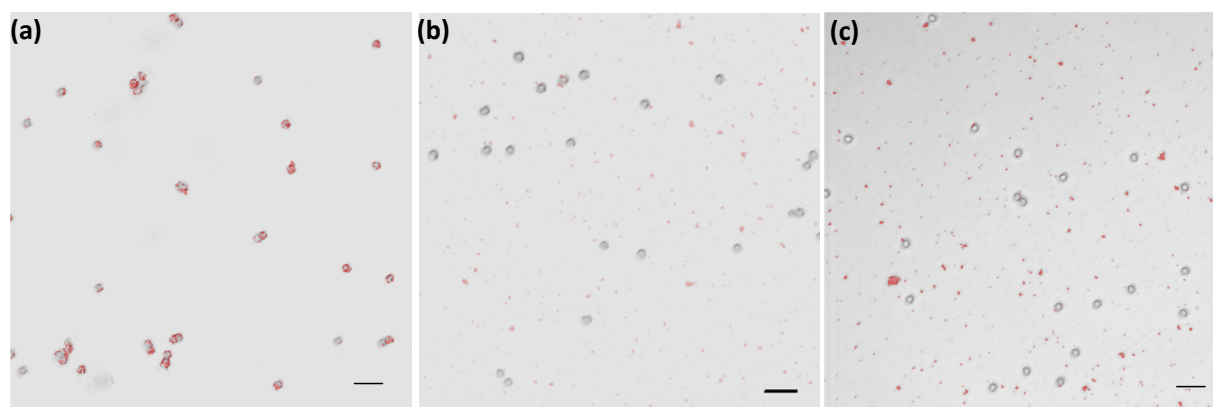


Figure S3. Confocal micrographs of suspensions of LNA-linked ($L^3A20:L^3M9$) colloidal satellite assemblies following a 24 h incubation at 37 °C with (a) **NC14**, (b) **B15**, or (c) L^3B15 secondary targets. Images are 3D compilations (DIC + fluorescence modes) of vertical z-stack micrographs taken from the same fields of view as Figure 7. Scale bars are 5 μm .