

## Electronic Supplemental Information (ESI)

**Synthesis and Characterization of  $\text{Si}_M\text{-C}_3\text{-NH}_2$  and  $\text{Si}_M\text{-C}_3\text{-NH}_2\text{-Dex}$  ( $M = \text{O, Mn, Fe}$ )** – The amine terminated particles and their dextran coated analogues were synthesized as outlined in our previous publications.<sup>1-3</sup> The  $\text{Si}_M\text{-C}_3\text{-NH}_2$  were analyzed by transmission electron microscopy (TEM) while dynamic light scattering (DLS) was used to analyze the dextran coated analogues  $\text{Si}_M\text{-C}_3\text{-NH}_2\text{-Dex}$ . The TEM images for  $\text{Si}_M\text{-C}_3\text{-NH}_2$  can be found in our earlier publications. The silicon nanoparticles  $\text{Si-C}_3\text{-NH}_2$  have a core diameter of  $3.9 \pm 1.3 \text{ nm}^1$  as determined by TEM while the dextran coated silicon nanoparticles  $\text{Si-C}_3\text{-NH}_2\text{-Dex}$  have a hydrodynamic diameter of  $7.6 \pm 1.0 \text{ nm}$  as determined by DLS (Figure S1). The TEM and DLS data for  $\text{Si}_{\text{Mn}}\text{-C}_3\text{-NH}_2$  and  $\text{Si}_{\text{Mn}}\text{-C}_3\text{-NH}_2\text{-Dex}$  is published and can be found elsewhere.<sup>2,3</sup> The core diameter for  $\text{Si}_{\text{Fe}}\text{-C}_3\text{-NH}_2$  is measured to be  $2.99 \pm 0.99 \text{ nm}$  while the dextran coated analogue  $\text{Si}_{\text{Fe}}\text{-C}_3\text{-NH}_2\text{-Dex}$  have a diameter of  $8.81 \pm 0.70 \text{ nm}$  (Figure S2).

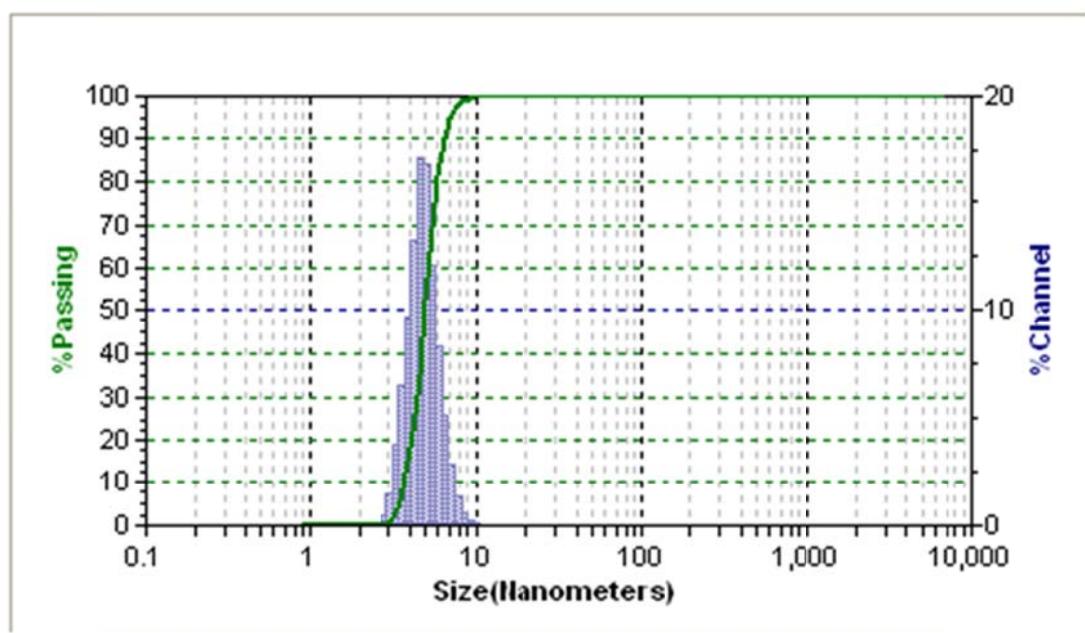


Figure S1: DLS of dextran coated silicon nanoparticles  $\text{Si-C}_3\text{-NH}_2\text{-Dex}$ .

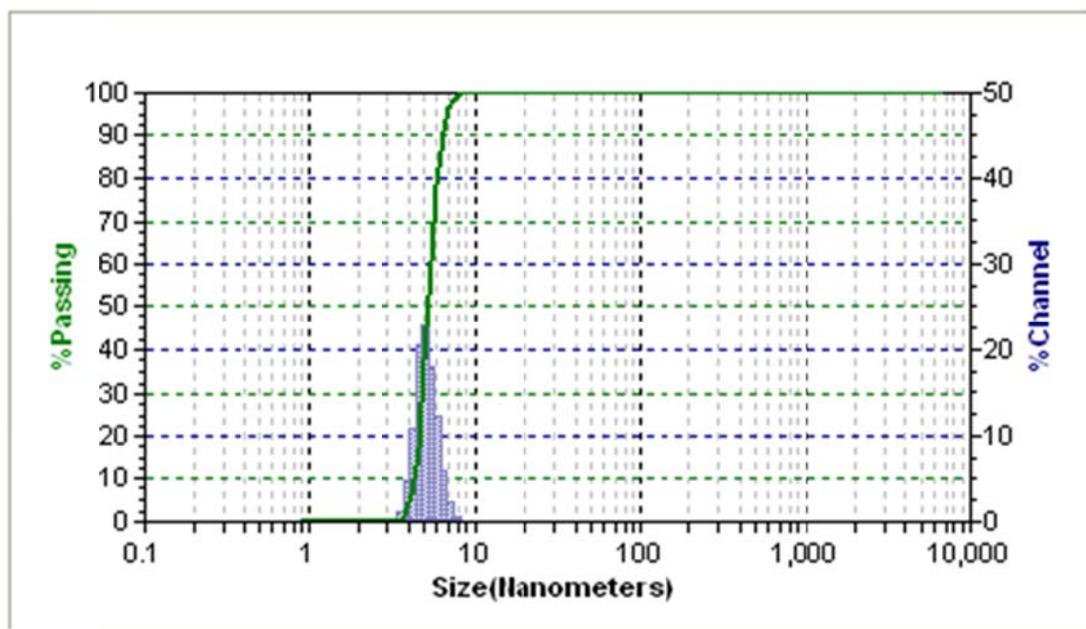


Figure S2: DLS of dextran coated iron doped silicon nanoparticles  $\text{Si}_{\text{Fe}}\text{-C}_3\text{-NH}_2\text{-Dex}$ .

**References:**

1. X. M. Zhang, D. Neiner, S. Z. Wang, A. Y. Louie and S. M. Kauzlarich, *Nanotechnology*, 2007, **18**.
2. C. Q. Tu, X. C. Ma, P. Pantazis, S. M. Kauzlarich and A. Y. Louie, *J. Am. Chem. Soc.*, 2010, **132**, 2016-2023.
3. C. Tu, X. Ma, A. House, S. M. Kauzlarich and A. Y. Louie, *ACS Med. Chem. Lett.*, 2011, **2**, 285-288.