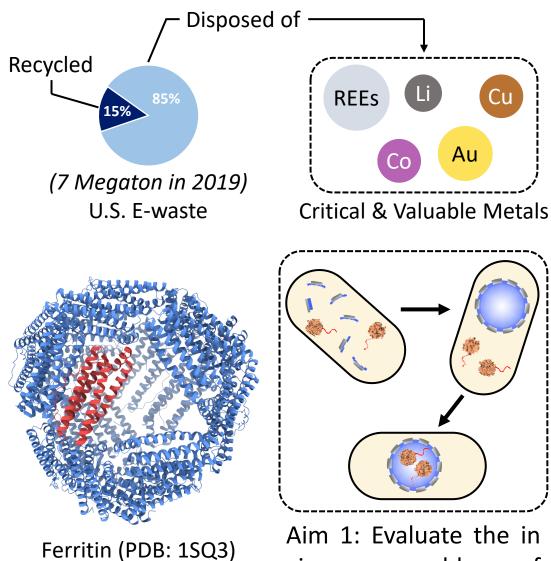
Engineering Subcellular Bioreactors for Selective Metal Recovery as Metallic Particles



Aim 1: Evaluate the in vivo assembly of subcellular bioreactors

Aim 2: Determine the metal-concentrating ability of intracellular ferritin

Aim 3: Assess the formation of metallic particles in ferritin reactors

Objective: To explore the feasibility of designing and engineering subcellular bioreactors to selectively concentrate and convert metal ions to particles.

Hypothesis: The co-expression of ferritin compartments and metal-converting enzymes would allow in vivo assembly of subcellular bioreactors that extract metal ions and produce metallic particles.

