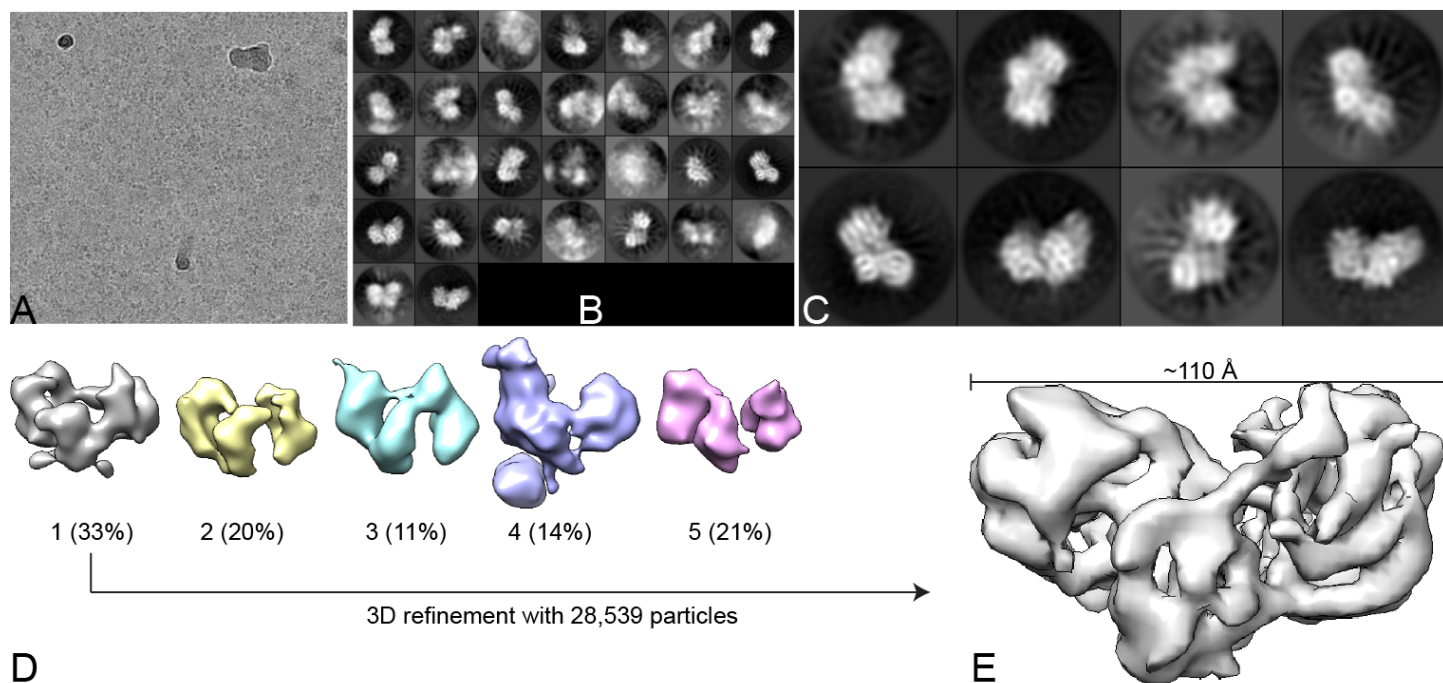


**Figure 1.** Proline catabolism and PutA. (A) Reactions of proline catabolism. (B) Domain diagrams of the three types of proline utilization A (PutA) proteins. (C) Model for functional switching of type C PutA between its transcriptional regulatory and enzymatic functions.



**Figure 2.** Preliminary cryo-EM data for a type C PutA (145 kDa monomer, 290 kDa dimer). (A) Image collected on a Krios at Purdue. (B) 2D class averages. (C) Selected 2D averages suggesting the potential for high resolution. (D) 3D class averages suggesting four conformational populations. (E) Model from 3D refinement of the particles in class 1. The model appears to show only the catalytic domains of one protomer of the presumed dimer, corresponding to residues ~86-1320.