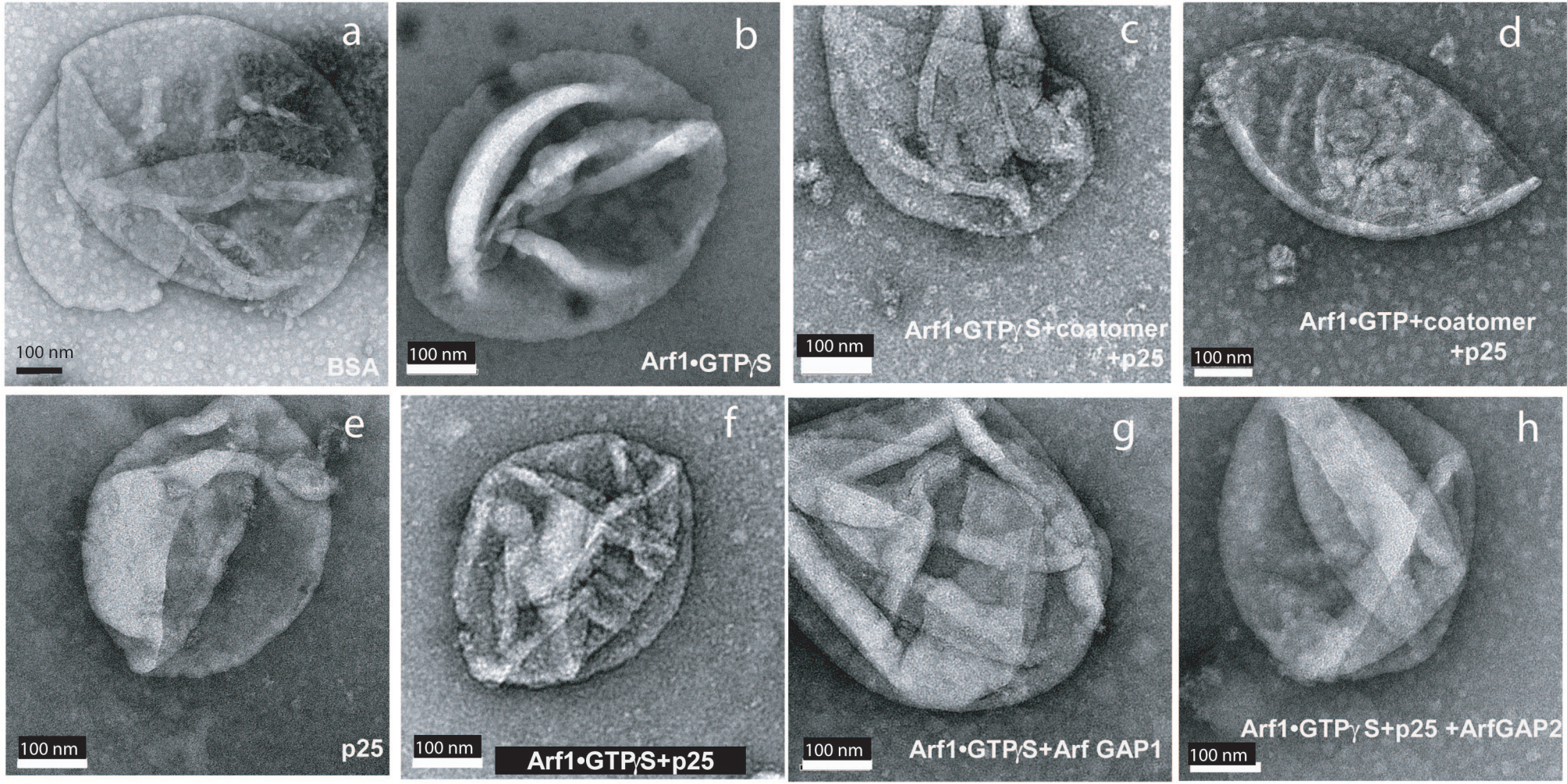
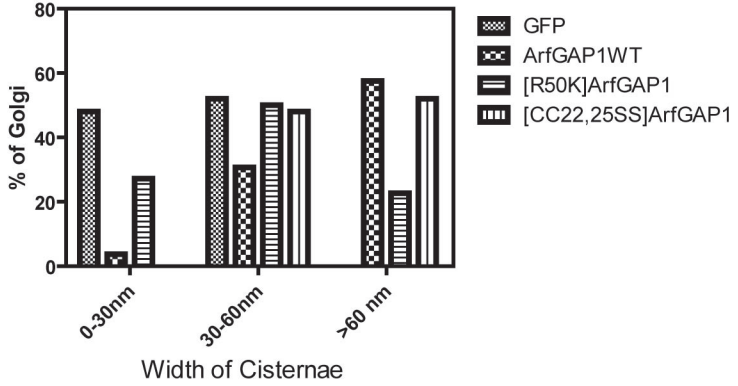


Figure S1 Shiba, Luo and others



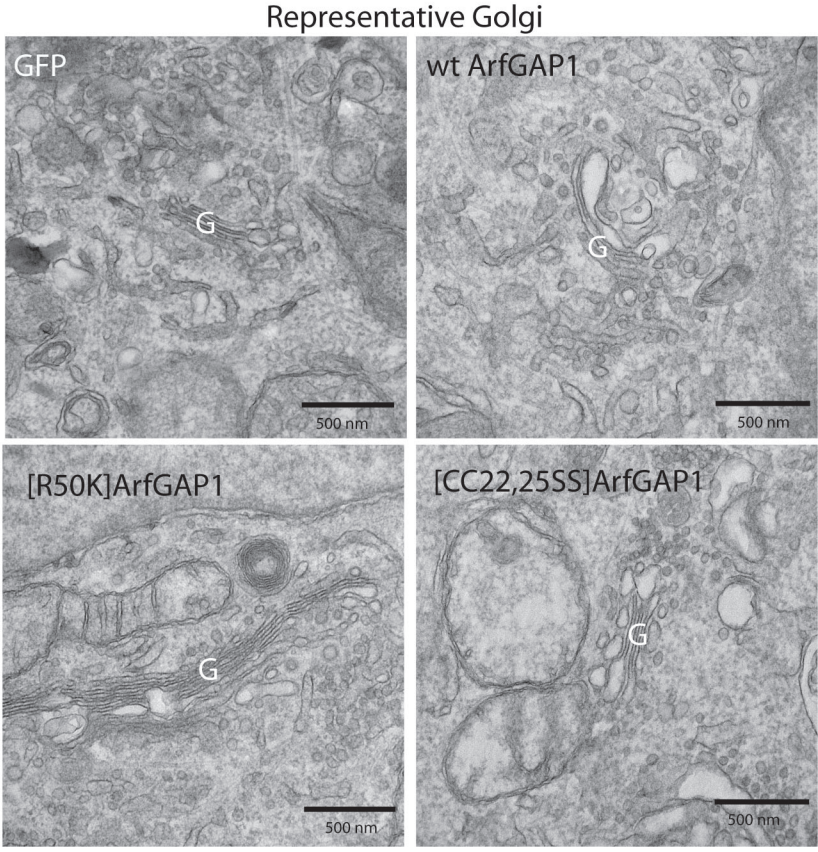


Figure S2. Shiba, Luo and others

Figure S1. Effect of myrArf1, Arf GAPs, coatomer and p25 cargo peptide on the shape of LUVs. LUVs were formed by extrusion through membrane with 1.0 μm pore size as described[75] and consisted of 40% phosphatidylcholine (PC), 25% phosphatidylethanolamine (PE), 15% phosphatidylserine (PS), 9% phosphatidylinositol (PI), and 10% cholesterol and 1% phosphatidylinositol 4-phosphate (PI4P). LUVs were incubated with the proteins and peptide indicated in the figure at the following concentrations: BSA, 5 μM; myrArf1•GTPγS, 0.1 μM; Arf1•GTP, 0.1 μM; ArfGAP1, 0.1 μM; ArfGAP2, 0.1 μM; coatomer, 0.124 μM; palmitoylated p25 peptide, 5 μM. LUVs were stained with uranyl acetate and visualized by TEM.

Figure S2. Effect of ArfGAP1 and mutants on cell ultrastructure. HeLa cells were cotransfected with plasmids directing the expression of the indicated ArfGAP1 and with a plasmid for the expression of Lac Z. The cells were prepared for TEM as described in "Materials and Methods." Random sections were examined and cells containing crystallized produced of the LacZ reaction, indicating transfection with LacZ, were analyzed. The width of the cisternae of at least 20 Golgi were determined under each condition. Representative images are shown. The stacks are indicated with "G."