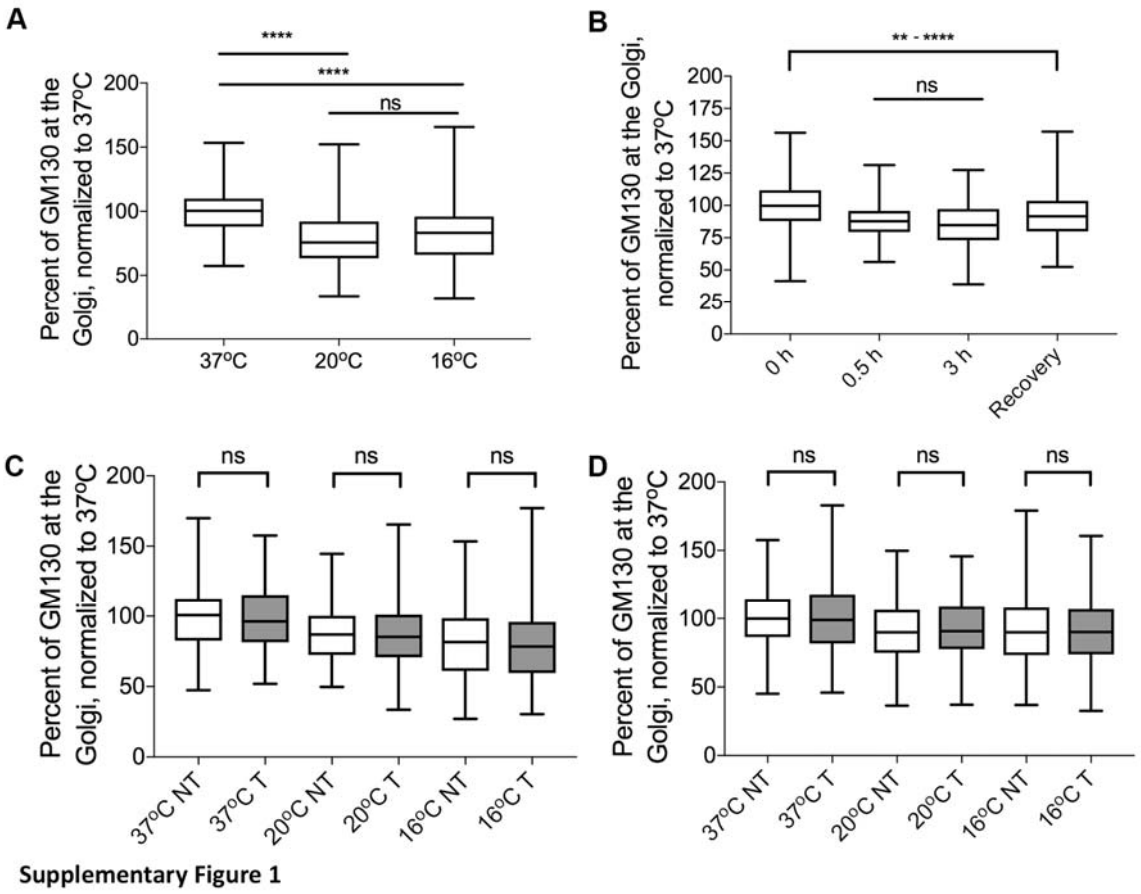
# Supplemental Materials

***Molecular Biology of the Cell***

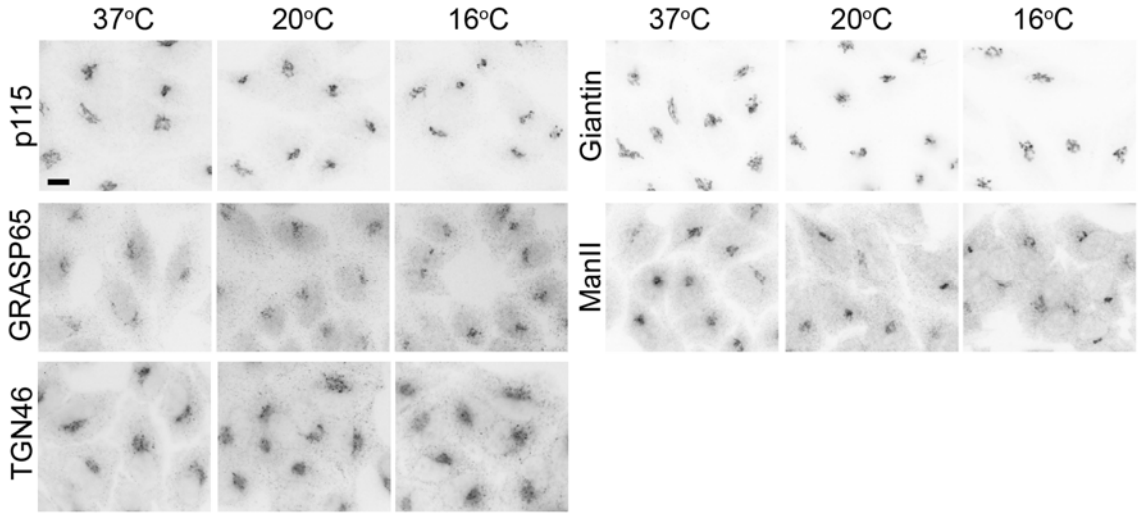
Gilbert et al.




**Supplementary Figure 1**

**Supplementary Figure 1.** Quantification of GM130 dispersal for Figures 1, 3, 6 and 7. GM130 localization was determined by immunofluorescence microscopy for each experiment in which quantification of golgin-160 localization was performed using mouse anti-GM130 followed by Alexa Fluor 568 anti-mouse IgG. Regions of interest encompassing the GM130 signal were outlined and defined as the Golgi region, and the fluorescence intensity within this region was measured. This was compared to the total cell GM130 fluorescence for each cell and values were normalized to 37°C as described in the Materials and Methods section. Graphs represent percent GM130 at the Golgi in the corresponding HeLa cells quantified for: (A) Figure 1 after 3 h incubation at 37, 20, and 16°C; (B) Figure 3 after 0, 0.5, or 3 h at 16°C or with a 0.5 h recovery time point; (C) Figure 5, with non-transfected (NT) cells and transfected (T) cells transiently expressing ARF1 Q71L; (D) Figure 6B-C, with NT cells and T cells transiently expressing GBF1. ns,

not significant; **, p<0.0034; ****, p<0.0001. All n values are identical to those found in their corresponding figures.




**Supplementary Figure 2**

**Supplementary Figure 2.** Several ARF- and ARL-independent proteins were unaffected by cold shifts. Proteins were analyzed by indirect immunofluorescence microscopy in HeLa cells after incubation at 37, 20, or 16°C for 3h. The cells were labeled with primary antibodies, as described in the Materials and Methods section, followed by Alexa Fluor 488 anti-rabbit IgG or Alexa Fluor 546 anti-mouse IgG. Scale bar, 10 μm.