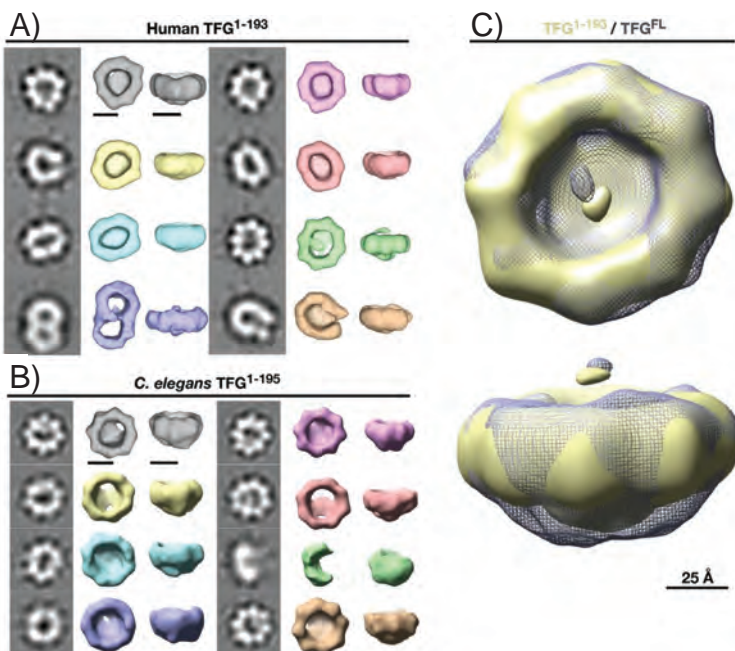


# Supporting Figures

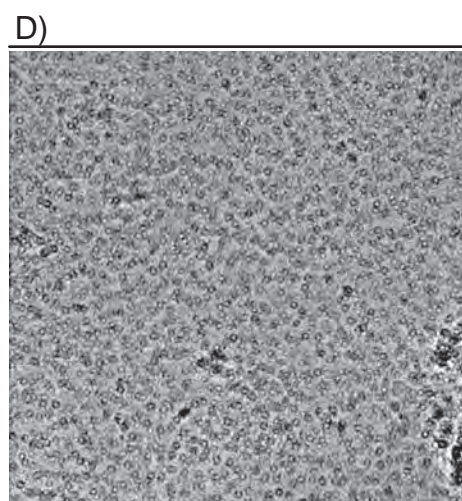


A) Montage of class averages and 3D volumes of human TFG (amino acids 1-193; EMDDataBank accession cod EMD-6076). Two sets of 2D class averages and 3D volumes are shown with the left columns showing the class averages generated by reference-free alignment and classification and the right columns showing 3D RCT volumes corresponding to the class average to the left. Scale bars, 50 Å.

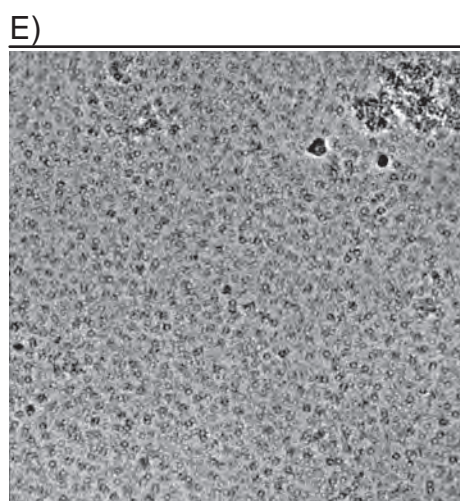
B) Montage of class averages and 3D volumes of *C. elegans* TFG (amino acids 1-195; EMDDataBank accession code EMD-6075), generated as described in (A). Scale bars, 50 Å.

C) Superposition of 3D volumes of full-length human TFG and truncated TFG (amino acids 1-193). The truncated form is depicted in yellow while the full-length form is depicted as a gray mesh. The top view (top) exhibits limited differences in structures, while the side view (bottom) shows extra density in the full-length TFG isoform. Scale bar 25 Å.

A. Johnson, et al. *The EMBO Journal*. Vol 34. No 6. 2015

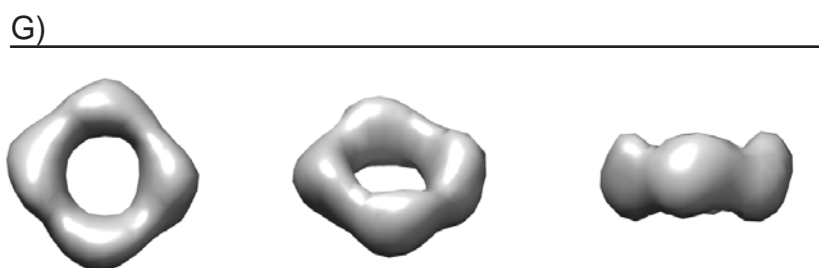
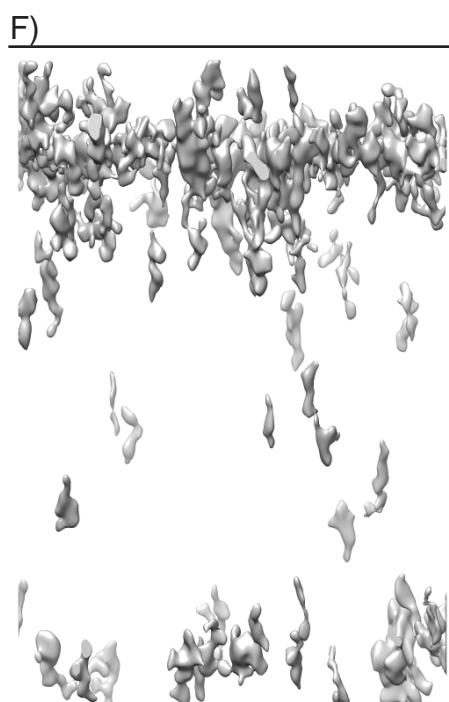


D) Micrograph of *C. elegans* TFG collected one TITAN Krios 300kV, on a DE64 with phase plate and counting.



E) Micrograph *C. elegans* TFG collected at 40° tilt with phase plate and counting.

Tomography on same sample reveals two layers of TFG, one at each air-water interface separated by thick, empty ice (G).



F) Side view of map generated from *C. elegans* TFG tomography (dust off). TFG clusters on the air-water interface, preferentially on one side, with an empty internal ice section separating the sides.

G) *C. elegans* TFG models generated from select particles from the *C. elegans* TFG tomography. Models were created adhoc and demonstrate 4-fold symmetry rather than 8-fold and do not have the cup features of the previous RCT models.