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On the cover (Oil painting by Julie Newdoll, [www.brushwithscience.com](http://www.brushwithscience.com)): A cell membrane constructed of the half human, half fish (both water loving and land creature) Oannes of Mesopotamian mythology divides the image into two worlds - that of the cytoplasm (black) below the outside the cell (red) above. In the cytoplasm reside the water creatures - species of fish and sea monster. They are glycosylated, if at all, with a single sugar GlcNAc, represented by the blue and white dragonfly (in the larvae stage in the water and as a dragonfly on the outside of the cell). Spanning the membrane are various characters from Greek mythology representing membrane proteins. They all hold or are attached to a straight or branched object, which represent straight or branched sugars. At the end of the chain of sugars is a purple bird, representing Neu5Ac. The objects in these glycans, like the bird, are colored to reflect the "Recommended symbols and conventions for drawing glycan structures" published in the *Essentials of Glycobiology*<sup>®</sup>. Hera (or Juno) holds her golden apple tree full of Gal, GalNac, and GalN. Cerberus sports a snake on each head, which might be a short chain of IdoA and GalA, all with the purple bird on the end of each branch (Neu5Ac), while the ram with the golden fleece has only a single GlcNAc, reflecting the possibility that proteins in the cytoplasm may be glycosylated in this way as shown recently in the literature. For details, see *Essentials of Glycobiology*, 2009, 2nd edition, Varki A, Cummings RD, J.D. Esko, et al., eds., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY.

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