

STUDY QUESTIONS FOR GLYCOSYLATION DISORDERS AND THERAPY JUNE 2, 2016

1. How do you define a “[glycosylation](#)” disorder? What methods are used today to identify a glycosylation disorder?
2. If you were presented with a patient thought to have a glycosylation disorder how would you determine the genetic defect—you’ll need to use all your skills plus knowledge of glycans.
3. Serum transferrin has two N-[glycosylation](#) sites and each [glycan](#) consists of biantennary [sugar](#) chains with sialic acid. What kinds of glycan patterns would you expect in patients with congenital disorders of glycosylation (CDGs)? Can you identify the genetic lesion based on a glycosylation pattern?
4. Explain how “gain-of-function” mutations can cause a [glycosylation](#) disorder.
5. How would you assess the genetic and environmental contributions to a [glycosylation](#) disorder?