

# Systems Biology of Glycosylation

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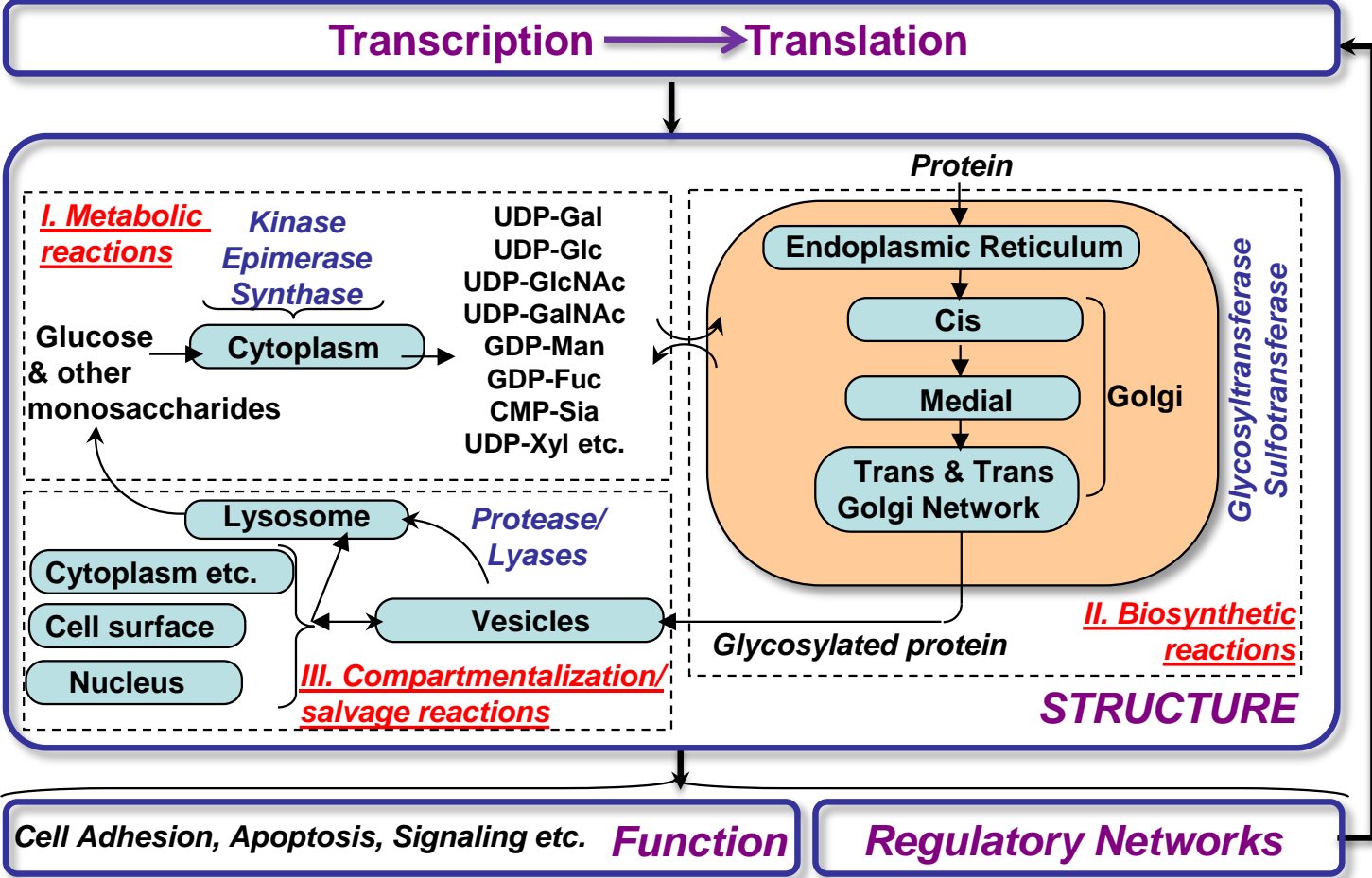
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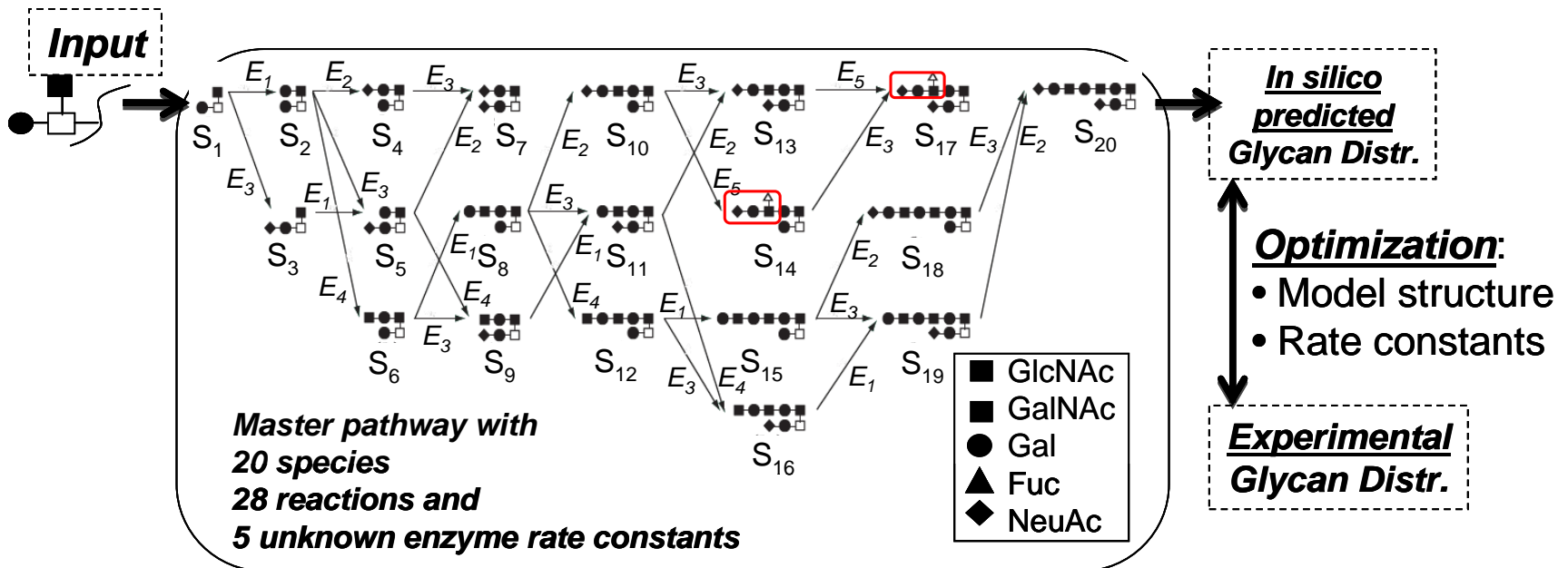
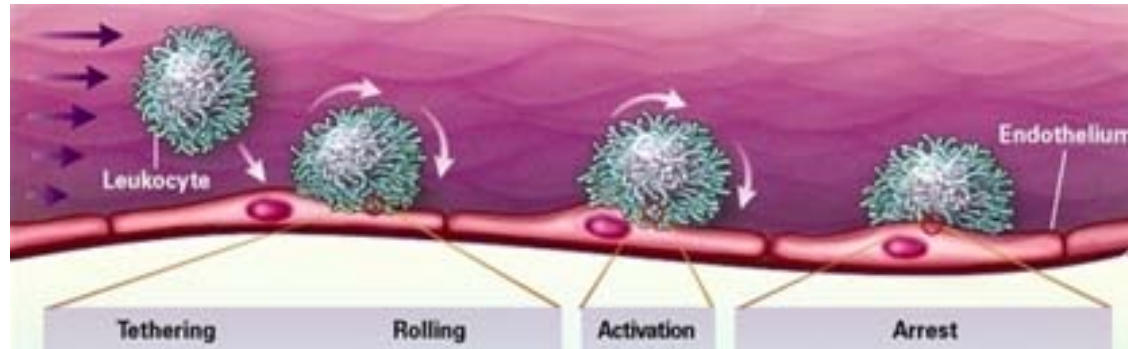
# Why should we model glycosylation?

- Most proteins in the human body that are either secreted or that appear on cell surface are glycosylated
- Glycosylation plays a critical role in cell adhesion and signaling pathways
- Analytical tools in the field of Glycomics are improving rapidly and new opportunities exist
- Glycans are accessible

# Glycosylation is amenable to chemical kinetic analysis



# Pathways for the construction of sialyl Lewis<sup>x</sup> type structures on leukocytes



# Interrogating glycosylation pathways using RNA interference

