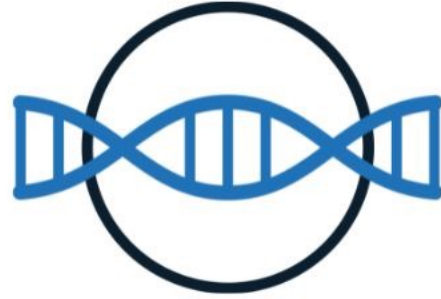




Rüdiger Horstkorte
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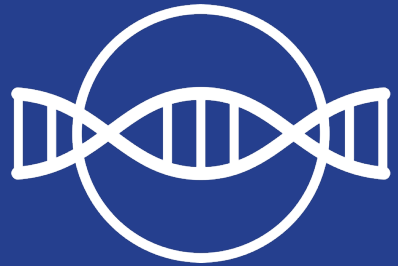
Posttranslational Modifications Of The GNE

Sunday, July 31st 2022 • 9am PT

Introduction & Summary Slide for:
“Posttranslational Modifications Of The GNE”

1. Sialic acids are structural components of glycoconjugates
2. GNE is the key enzyme of the sialic acid biosynthesis
3. Mutations within the gene of the GNE are most probably responsible for the GNE myopathy
4. GNE activity is regulated by:
 - assembly of monomers
 - feedback inhibition of CMP-sialic acid





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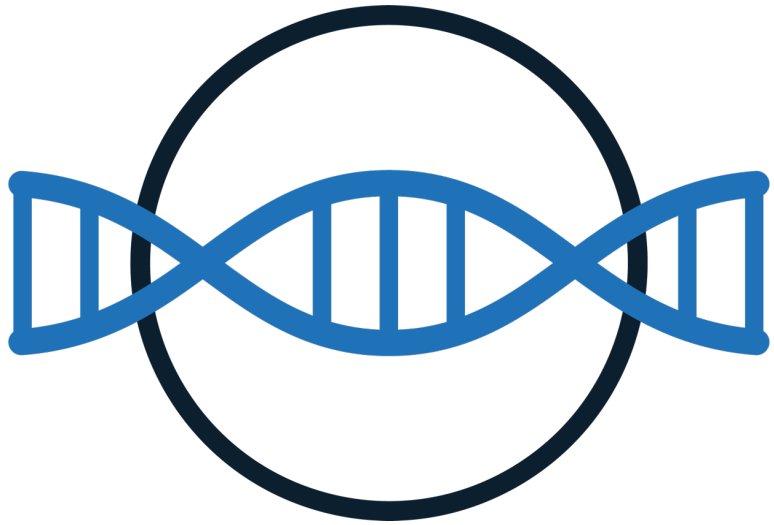
FINAL HIGHLIGHTS:

“Posttranslational Modifications Of The GNE”

Key Takeaways

1. Sialic acids are structural components of glycoconjugates
2. GNE is the key enzyme of the sialic acid biosynthesis
3. UDP-GlcNAc 2-Epimerase activity is regulated by the interplay between phosphorylation and O-GlcNAcylation
4. ManNAc-kinase activity is reduced after non-enzymatic glycation and AGE formation





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