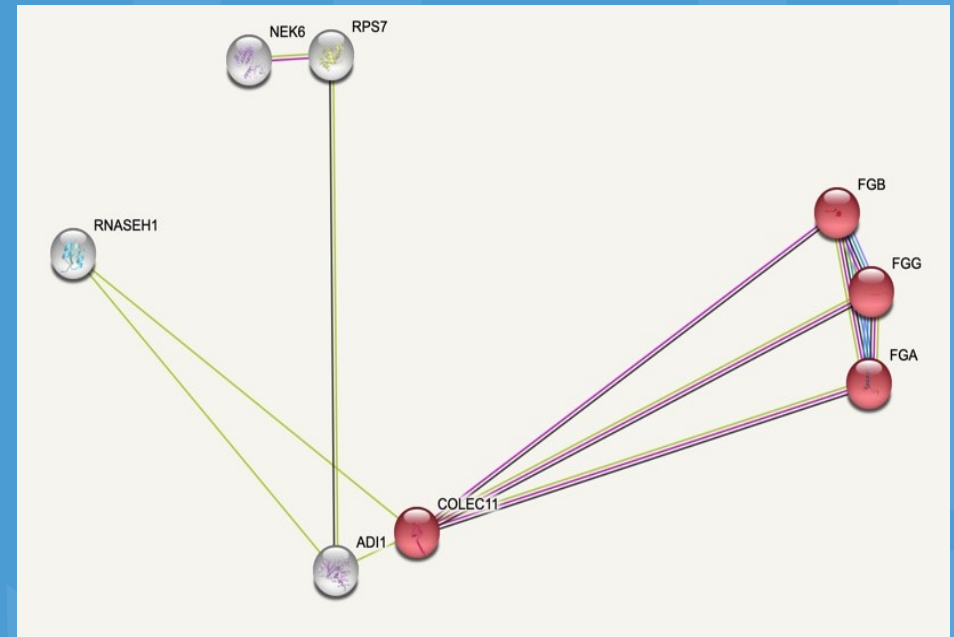


# Identifying Candidate Genes and Pathways Regulating Fibrinogen Expression

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COLEC11 Gene relationship to Fibrinogen (FGG,FGB,FGA)

# About Fibrinogen

- Fibrinogen is a protein that is important in making blood clots
  - More Fibrinogen → easier to make blood clots
- Questions of Interest:
  - Can we use a software called String to figure out what specific genes control how much fibrinogen our body makes?
  - Can we connect the function of those genes to the amount of fibrinogen our body makes?
- Why Does this matter?
  - If we can figure out what genes control the amount of fibrinogen our body makes, we can then try to use those genes to control our body's ability to clot blood
    - Ex. Help someone who is bleeding profusely to stop bleeding or; lessen the likelihood of conditions caused by clots such as heart attacks and strokes

# Findings

- So far, I have been able to identify 24 genes that control how much fibrinogen our body makes
  - Most of these genes share the same function in that they are involved in the way our body breaks down proteins
  - This will be beneficial to other researchers in the field because they can further study these genes in depth and try to develop techniques to control them and eventually use them in a therapeutic manner
    - Ex. Developing a new drug that people prone to cardiovascular diseases can use
  - This is important to society because cardiovascular diseases and strokes result in a substantial amount of deaths every year