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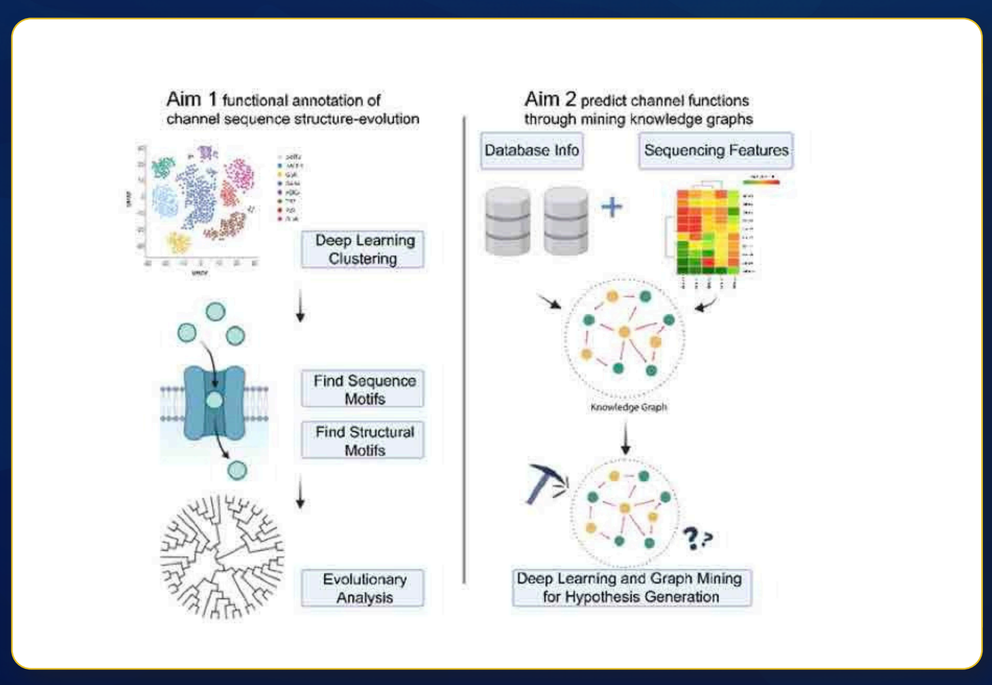
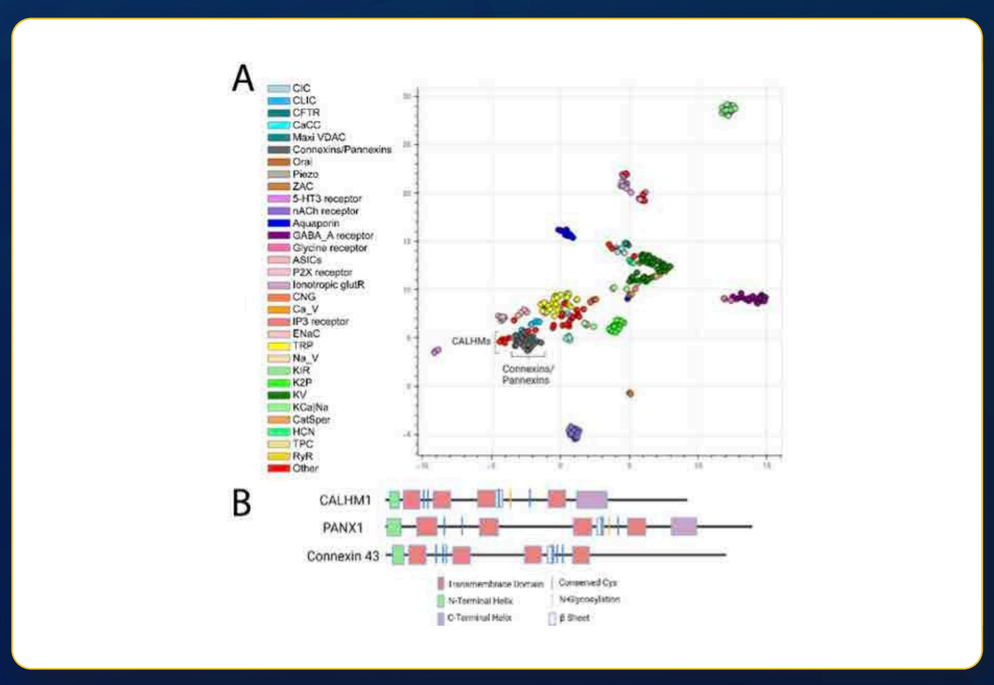
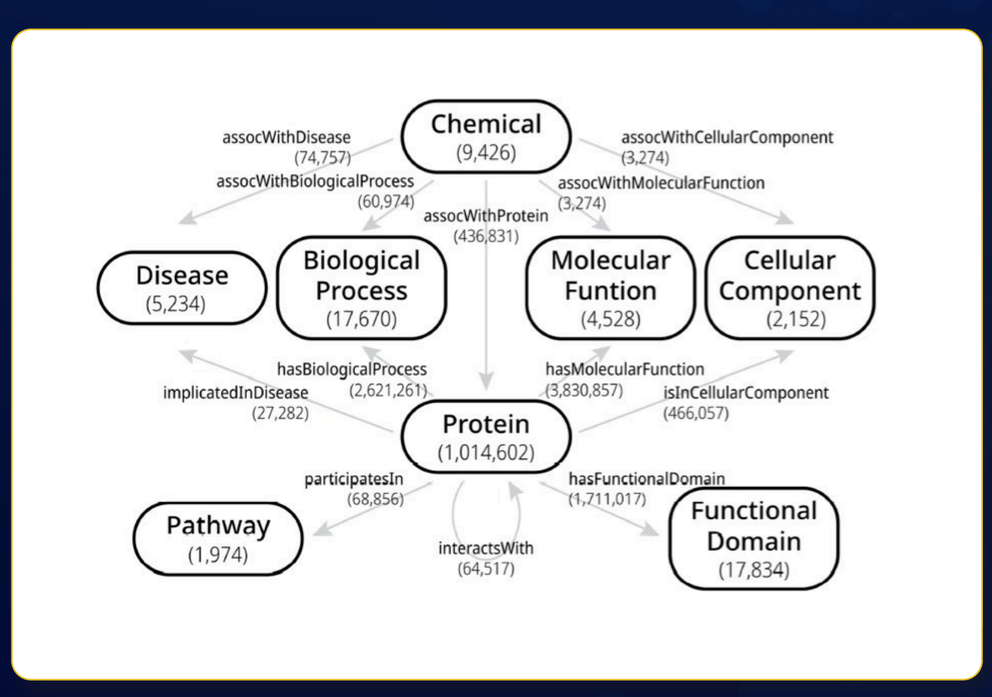
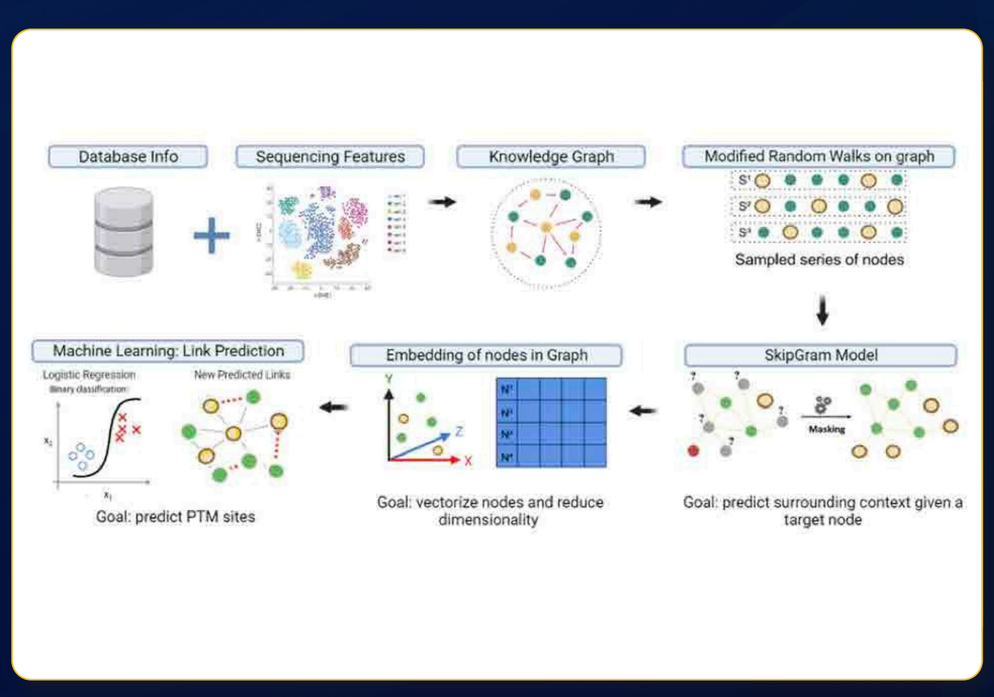
Utilizing deep learning to elucidate Ion channel structure and function

Ion channels are membrane bound proteins that play a central role in critical biological functions and are thus important drug targets. Due to the difficulty in studying these proteins with traditional experimental and bioinformatic techniques my research proposes to use deep learning models which allow for the creation of a mathematical representation of the protein and for data integration using a knowledge graph allowing for predictions to be made on ion channel structure/function.









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