

Abstract Submitted
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Modeling myosin VI stepping dynamics RIINA TEHVER, Denison University — Myosin VI is a molecular motor that transports intracellular cargo as well as acts as an anchor. The motor has been measured to have unusually large step size variation and it has been reported to make both long forward and short inchworm-like forward steps, as well as step backwards. We have been developing a model that incorporates this diverse stepping behavior in a consistent framework. Our model allows us to predict the dynamics of the motor under different conditions and investigate the evolutionary advantages of the large step size variation.

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