

Abstract Submitted
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Dynein Motility Modeling DAVID ROUNDY, WEIHONG QIU, KARL HELDT, ELLIOTT CAPEK, Oregon State University — Dynein is a motor protein which travels along microtubules. It is responsible for transporting organelles and other molecules around the cell. Dynein's stepping pattern is very irregular when compared to other motor proteins, which makes it particularly interesting. I will present a computational model of Dynein's motion, which takes into account the Brownian dynamics which are important for molecules of Dynein's size. I will discuss what is currently known about Dynein motion and the methods we use in modeling the protein's behavior.

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