

Molecular mechanisms of small molecule transport

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Structures of small-molecule transporters have shed light on the conformational changes that take place during structural isomerization from outward to inward-facing states. Rather than a simple "rocking" movement of two bundles around a central substrate-binding site, it has become clear that even the most simplistic transporters utilize non rigid-body rearrangements. Here I will present two examples of SLC transporters and their homologues that reveal novel refinements to the basic alternating access model currently shown in most textbooks.

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