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Propositions

belonging to the PhD thesis

Biochemical and structural insights in bacterial B-type vitamin transporters of the Pnu family

by

Rajkumar Singh

1. The Pnu (Pyridine Nucleotide Uptake) transporter family is responsible for B-type vitamin transport across the membrane in bacteria (this thesis).
2. Different subtypes of Pnu transporters are specific for distinct vitamin substrates (this thesis).
3. PnuT transports thiamine via a facilitated diffusion method, without hydrolysis of ATP molecules or transport of coupling ions (this thesis).
4. SemiPnu proteins form stable homodimers, similar to SemiSWEET proteins (this thesis).
5. Both monomeric and dimeric states of SecA protein bind to 70S ribosomes (this thesis).
6. Getting a well diffracting crystal requires the ability to go from one failure to another without losing enthusiasm.
7. Apart from a good work, researchers also need a good luck to publish their work.
8. The proper use of Science is not to conquer Nature but to live in it (Barry Commoner).