



University of Groningen

Vitamin B12 Transport in Bacteria

Rempel, Stephan

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2019

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Rempel, S. (2019). Vitamin B12 Transport in Bacteria: A structural and biochemical study to identify new transport systems. [Groningen]: University of Groningen.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

PROPOSITIONS

belonging to the thesis

Vitamin B12 Transport in Bacteria

a structural and biochemical study to identify new transport systems

by

STEPHAN REMPEL

1. Bacterial vitamin B12 transporters are structurally diverse and their transport mechanisms differ.
2. Some vitamin B12 transport systems may have achieved kinetic convergence, like BtuCDF and ECF-CbrT.
3. Solitary S-components represent a functional transport system for compounds that are not needed in high amounts by bacterial cells.
4. Solitary and non-solitary S-components are functionally distinct.
5. The sequence analysis of BtuM shows the strengths and limitations of bioinformatic predictions.
6. Characterizing a protein, of which only its sequence is known has its perks but also poses a formidable challenge.
7. At the moment, an unsustainable large amount of PhD degrees is awarded.
8. Like for other academic degrees, there should be a grading system for PhD candidates.
9. Fairness at the workplace is important to keep a healthy, supportive, and positively competitive atmosphere.