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Author <b>Hanna Härdin</b>		
Title (English) <b>Modeling and simulation of stimulation of motility in <i>Synechocystis</i> PCC 6803</b>		
Abstract <p>When the cyanobacterium <i>Synechocystis</i> PCC 6803 is exposed to blue light, it responds by moving away from the light source. There are also indications that, when exposed to glucose, the bacterium responds by decreasing its motility. These processes are controlled by a large and complex network of genes, a so-called genetic regulatory network. Because of the lack of information about the components of the network underlying these processes in <i>Synechocystis</i> PCC 6803, several alternative networks can be imagined. These possible networks have been modeled and simulated. Since almost no quantitative data on the system is available, a qualitative simulation method that can handle these constraints has been used. By analyzing the simulation results, it has been possible to select experiments that would discriminate effectively between possible networks.</p>		
Keywords Qualitative modeling and simulation, genetic regulatory networks, chemotaxis, phototaxis, motility, <i>Synechocystis</i> PCC 6803, piecewise-linear differential equations		
Supervisors <b>Hidde de Jong</b> <b>Helix bionformatics, INRIA Rhône-Alpes, Grenoble</b>		
Scientific reviewer <b>Måns Ehrenberg</b> <b>Department of Cell &amp; Molecular Biology, Uppsala University</b>		
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<b>Biology Education Centre</b> Box 592 S-75124 Uppsala	<b>Biomedical Center</b> Tel +46 (0)18 4710000	<b>Husargatan 3 Uppsala</b> Fax +46 (0)18 555217