

Gene Circuit

Participants: Laurence Seeley, Caius Gibeily

Looked at further estimating the amount of shinorine you may need to protect one person. Discussed issues with our chassis organism being able to stay on the surface of the skin. Discussed ideas of how to rationally engineer our genes into our chassis. Continued to look at aspects of the kill switch as well as activation of the shinorine pathway. Also discussed optimising promoter binding efficiency.

Funding

Participants: Laurence Seeley, Poli Foteva, Caius Gibeily, Isobel Guthrie, Yaxuan Kong, Bradley McCallion, Anneleen de Ruiter

Created a Genscript profile and further edited information for the site. Continued with various other funding applications alongside the promotional video for experiment.com.

Modelling

Participants: Caius Gibeily, Laurence Seeley

Designed a static model for approximate shinorine concentration by deriving surface area formula and bac volume. Looked at thermodynamic modelling to apply this to shinorine production component.

Looked at the substrate sedoheptulose 7-phosphate accumulation and maximisation of shinorine synthesis by using strong promoters from the Anderson catalogue and removing certain genes.

Wiki

Participants: Issac Li, Bradley McCallion

Looked at example wiki pages from past iGEM teams and reviewed iGEM Wiki requirements.