

Task		Wet Lab	Dry Lab	Other
Year 1	Summer 2020	clone genetic parts, assemble plasmids	design primers, genetic constructs and knock-out plasmids	Write-up 1st year report, BIOPEC conference
	Michaelmas 2020	probably more cloning, generate knock-out and complementation strains	construct biophotovoltaic devices	
	Lent 2021	mechanisms of PrqR induction + characterise genes repressed by PrqR	analyse and plot activity of prqR promoter at different applied potentials	
	Easter 2021	biochemical characterisation of mutants	analyse growth dynamics of mutants and wild-type in different conditions	
	Summer 2021	bioelectrochemical characterisation of mutants	identify candidate genes for qPCR and design primers	
Year 2	Michaelmas 2021	protocols to quantify changes in gene expression	design optically-accessible microplate BPV/microfluidics devices	start applying for PIPS
	Lent 2022	probably more molecular characterisation of genes	bioinformatic analysis of up/down-regulated genes	Write up
	Easter 2022	assemble multispecies communities	model growth dynamics of species coexisting in communities	2nd Year Report
	Summer 2022			PIPS?
Year 3	Michaelmas 2022	biochemical characterisation of communities	validate models with experimental data	Start to write up thesis
	Lent 2023	bioelectrochemical characterisation of mutants	model dynamics of electrical/redox signalling in communities	Write up
	Easter 2023	quantify electrical/redox interactions in communities	analyse and plot results	Write up
	Summer 2023	repeat/perform last experiments	analyse and plot results	Write up
	Michaelmas 2023	Thesis submission		