

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Single gene knockout analysis

File Name: Supplementary Data 2

Description: Inconsistent Genes / Binomial Proportion Confidence interval

File Name: Supplementary Data 3

Description: This Paper vs Karr et al. 2012

File Name: Supplementary Data 4

Description: Decision tree

File Name: Supplementary Data 5

Description: Minesweeper_256 + GAMA_236 / 237 Comparison

File Name: Supplementary Data 6

Description: Shared and Unique Gene Deletions of Minesweeper_256 and GAMA_237

File Name: Supplementary Data 7

Description: Mycoplasma genitalium whole-cell model + MG_006 + Minesweeper_256 + GAMA_236 + GAMA_237

File Name: Supplementary Data 8

Description: Investigation of a potential redundant essential pair and group

File Name: Supplementary Data 9

Description: Matching Genes and Go (Biological Process) Terms for Mycoplasma genitalium whole-cell model

File Name: Supplementary Data 10

Description: Go Terms Dictionary

File Name: Supplementary Data 11

Description: Matched Genes and GO Terms

File Name: Supplementary Data 12

Description: Minesweeper_256 Deletions Impact on GO Terms

File Name: Supplementary Data 13

Description: GAMA_237 Deletions Impact on GO Terms

File Name: Supplementary Data 14

Description: Theory underlying GAMA genome design algorithm

File Name: Supplementary Data 15

Description: Investigating a stubborn gene

File Name: Supplementary Data 16

Description: Improving division rate

File Name: Supplementary Data 17

Description: Reactions that produce ATP in the M.g whole cell model

File Name: Supplementary Data 18

Description: Shared genes vs JCVI-Syn3.0.