Online Resource 4 for Design of Experiment (DOE) Applied to Artificial Neural Network Architecture Enables Rapid Bioprocess Improvement

Journal: Bioprocess and Biosystems Engineering

Daniel Rodriguez-Granrose[1,2], Amanda Jones[1], Hannah Loftus[1], Terry Tandeski[1], Will Heaton[1], Kevin T Foley[1,3,4], Lara Silverman[1,3]

Affiliations:

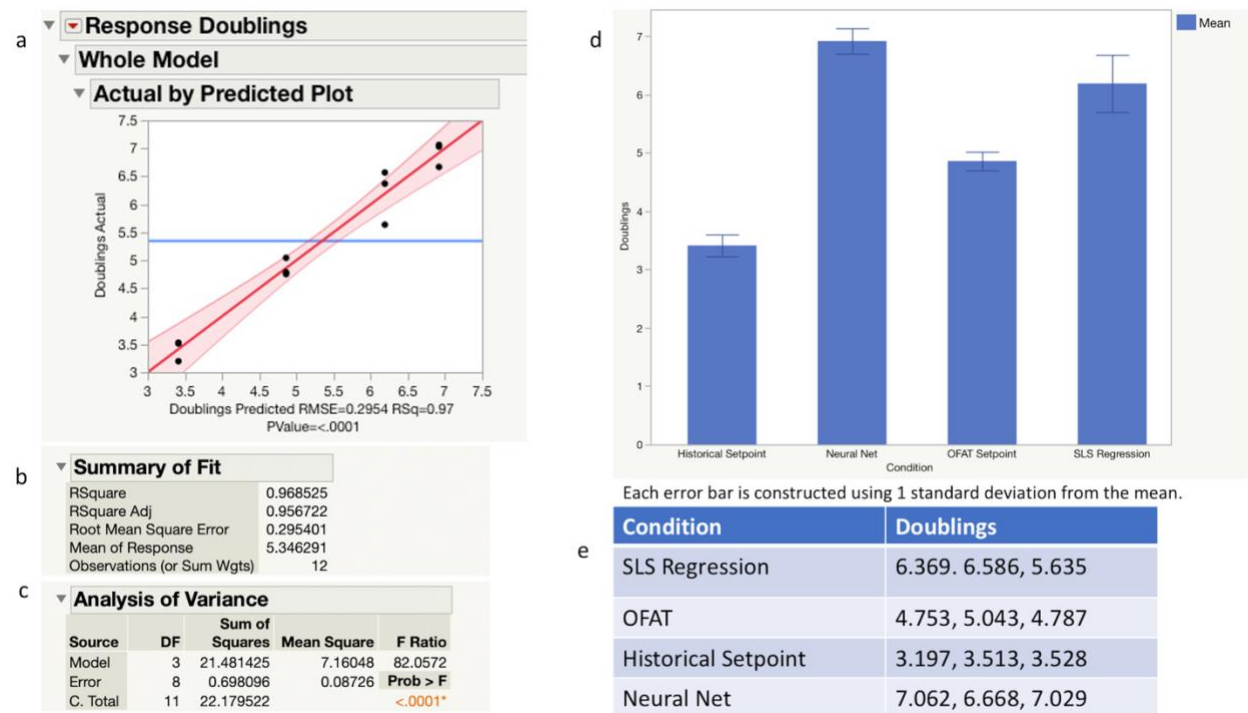[1] DiscGenics Inc, Salt Lake City, Utah, USA
[2] Department of Biochemistry and Molecular Biology, University of Miami, Miami, FL, USA
[3] Department of Neurosurgery, University of Tennessee Health Science Center, Memphis, Tennessee, USA
[4] Semmes-Murphey Clinic, Memphis, Tennessee, USA

Corresponding Author:
Daniel Rodriguez-Granrose
daniel@discgenics.com

Online Resource 4 a: Regression Model of the Four Tested Bioprocess Setpoints The regression model compares doublings compared by our four process setpoints. We show a strong regression line with **b: summary of fit** ($R^2 = 0.97$), **c: ANOVA table** ($P < 0.001$) and actual values. This model provides the basis for Fig 4C within the manuscript **d: doubling bar graphs**

and **e: doubling values for individual flasks by bioprocess setpoints** Online Resource 4 was created using JMP Pro v. 14