“Using synthetic genes to navigate megadimensional biological space. Protein engineering and Expression optimization”

Claes Gustafsson, PhD.
VP Sales and Marketing
DNA2.0 Inc

The megadimensional DNA and protein space is vast, sparsely populated and non-additive making the process to identify improved proteins or genes difficult. Megadimensional space is not unique to DNA/protein. Mathematical tools have long been developed to navigate such space in eg. fermentation optimization, credit card fraud detection, stock trading etc. DNA2.0 (www.DNA20.com) is using these tools in conjunction with efficient gene synthesis to optimize proteins for improved functional activity and genes for increased heterologous expression. Several published and unpublished case studies for both protein engineering and gene optimization will be presented.

The DNA2.0 technology for gene optimization was awarded "Top 10 Innovations 2009" by The Scientist.

3:30- 4:30pm
Thursday, January 28, 2010
239 Gortner Lab
St. Paul Campus

Questions or special needs please contact Marie Raley at 612.624.6774 or bti@umn.edu