The neural network programs included as part of the UT-SRP modeling package are based on a purely data-driven methodology. As such, they represent an entirely empirical approach to predicting HETP for structured packings and sieve tray point efficiency. A detailed discussion of the programs is available in two publications listed below which are available on-line from The American Chemical Society at http://pubs.acs.org/journals/iecred/index.html. The fit obtained from applying the approach to experimental mass transfer data is outstanding and significantly surpasses the accuracy of existing semi-empirical models. However, the ultimate accuracy of the approach to predict commercial scale column performance is unknown.

E. Olivier, R. B. Eldridge, "The Prediction of Trayed Distillation Column Mass Transfer Performance by Neural Networks," *Ind. Eng. Chem Res.* (41) No. 14, 3436, 2002.

G.S. Pollock, R. B. Eldridge, "Neural Network Modeling of Structured Packing Height Equivalent to a Theoretical Plate," *Ind. Eng. Chem. Res.* (39) No. 5, 1520, 2000.

Contact Bruce Eldridge if you have questions about Neural Networks.