Joseph P Rusinko, Jennifer Vandenbussche* (jennifer.vandenbussche@kennesaw.edu) and Qingyi Lu. Improving Statistical Binning Techniques for Species Tree Reconstruction.

This talk presents the results of an analysis of the mechanism by which the use of statistical binning in species tree reconstruction, introduced by Mirarab et al., results in estimated species trees more closely aligned with true species trees. We also present evidence that the use of Transfer bootstrap values (introduced by Lemoine et al.) in conjunction with a topological constraint, rather than traditional Felsenstein bootstrap values, can lead to more accurate binning decisions. Unlike the original statistical binning approach, the recommended decision criteria does not depend on the level of incomplete lineage sorting. (Received September 20, 2018)