1135-VV-1168 **Kendra Killpatrick*** (`kendra.killpatrick@pepperdine.edu`) and **Kristina Garrett**. *Pattern Avoiding Generalized Alternating Permutations.*

In 2011, Lewis proved that the number of alternating permutations of length $2n$ avoiding the pattern 1234 is counted by the number of standard Young tableaux of shape $< 3^n >$. Lewis generalized further to the set $L_{n,k}$ of permutations $\pi = \pi_{11}\pi_{12}\pi_{13}\cdots\pi_{1k}\pi_{21}\pi_{22}\cdots\pi_{2k}\cdots\pi_{n1}\pi_{n2}\cdots\pi_{nk}$ of length nk such that $\pi_{i1} < \pi_{i2} < \cdots < \pi_{ik}$ for $1 \leq i \leq n$ by proving that the number of permutations in $L_{n,k}(123\cdots k(k+1)(k+2))$ is counted by the number of standard Young tableaux of shape $< (k+1)^n >$.

In 2017, Mei and Wang further extended Lewis' results to permutations in $L_{n,k,I}(123\cdots k(k+1)(k+2))$ for an index set $I \subseteq [n]$ and proved that these permutations were counted by standard Young tableaux of shape $< (k+1)^n >$ independent of index set I. In their paper, Mei and Wang pose the question about finding a direct bijection between the pattern avoiding permutations in $L_{n,k,I}$ for different index sets I that does not rely on the RSK correspondence and the standard Young tableaux. This talk will answer that open question by giving such a bijection and discuss the connection of this result to certain skew tableaux. (Received September 20, 2017)