An inversion sequence is a sequence of nonnegative integers $e_1 e_2 \ldots e_n$ such that $e_i < i$. These sequences are used to encode permutations in various ways, including Lehmer codes and inversion tables. During Permutation Patterns 2014, the concept of pattern-avoiding inversion sequences was introduced by Savage. We describe some recent results and open questions. This includes joint work with Sylvie Corteel, Carla Savage, and Michael Weselcouch. (Received August 11, 2015)