James M Hammer* (jmh0036@auburn.edu), 100 College Drive, Curtis 219, Allentown, PA 18104, and John Asplund, Joe Chaffee and Matt Noble. γ' -Realizability and Other Musings on Inverse Domination.

This talk will introduce and study γ' -realizable sequences. For a finite, simple graph G containing no isolated vertices, $I \subseteq V(G)$ is said to be an *inverse dominating set* if I dominates all of G and I is contained by the complement of some minimum dominating set D. Define a sequence of positive integers (x_1, \ldots, x_n) to be γ' -realizable if there exists a graph G having exactly n distinct minimum dominating sets D_1, \ldots, D_n where for each $i \in \{1, \ldots, n\}$, the minimum size of an inverse dominating set in $V(G) \setminus D_i$ is equal to x_i . In this work, we show which sequences having minimum entry 2 or less are γ' -realizable. We then detail a few observations and results arising during our investigations that may prove useful in future research. (Received July 22, 2018)