Neutron-knockout reactions on beam of $^{106}$Cd G. CERIZZA, A. AYRES, A. BEY, C. BINGHAM, L. CARTEGNI, R. GRZYWACZ, K.L. JONES, D. MILLER, S. PADGETT, University of Tennessee, T. BAUGHER, D. BAZIN, J. BERRYMAN, A. GADE, S. MCDANIEL, A. RATKIEWICZ, A. SHORE, R. STROBERG, R. STROBERG, D. WEISSHAAR, K. WIMMER, R. WINKLER, NSCL, A. CHAE, S.D. PAIN, ORNL, M.E. HOWARD, Rutgers University — Studies of neutron knockout reactions on a beam of $^{106}$Cd will help understanding single-particle state evolution close to $N=50$ and add information to the level schemes of the reaction residues. Spectroscopic studies have been performed utilizing the S800 and CAESAR at the NSCL. These studies make use of single-, double-, and triple-neutron knockout reactions on beams of $^{106}$Cd. The momentum distributions of the resulting residues reflect the $l$-value of the removed neutron. Additionally gamma rays were measured in coincidence allowing for the separation of the knockout channel where the residue is left in an excited state from the channel to the ground state. Results from these studies will be presented and are used to validate the technique as used in the light tin isotopes.