Name: Mark E. Everett Email: everett@noao.edu Institution: NOAO Title: Small Planet Validation from High- and Ultra-high-resolution Type: **Images Poster** Session: Earth Analogues and Super-Earths Abstract: co-authors: David R. Ciardi Elliott P. Horch Steve B. Howell Timothy D. Morton David R. Silva

> We present results from an exoplanet validation program designed to efficiently confirm a large sample of Kepler's small planet and habitable zone candidates. The validation method combines the constraints placed on the candidates by their Kepler light curves, ultra-high resolution speckle imaging from Gemini North, high resolution adaptive optics imaging, and single epoch reconnaissance spectra of each candidate planet's host star. The likelihood of astrophysical false positives is assessed for each candidate based on Galaxy model predictions for co-aligned field stars and the characteristics of unresolved multiple stars. The large sample of validated planets will be important for estimating occurrence rates of Earth-like planets around stars in the Kepler target list.