James W. Cogdell* (cogdell@math.ohio-state.edu), Department of Mathematics, 231 West 18th Avenue, Columbus, OH 43210. On Functoriality for the Classical Groups.

I would like to both survey past results and describe new results in the program of establishing functoriality to GL(n) using the converse theorem. Recently, with Piatetski-Shapiro and Shahidi, we have established the stability of certain local gamma-factors for quasisplit classical groups G under highly ramified twists, which is used in the proof of functoriality from G to GL(n) to finesse the lack of a full Local Langlands Conjecture for G. I will review the ideas in the proof of functoriality from G to GL(n) to place this stability result in context. Time permitting I would also like to discuss some of the ideas in the descent method of Ginzburg, Rallis, and Soudry that lets us characterize the image of global functoriality. (Received August 26, 2008)