Mouse fibroblasts respond to mechanical stimulation (uniaxial cyclic stretch) by reorganizing and reinforcing the actin cytoskeleton. HspB1, a downstream target of the p38 MAPK pathway, is found along the actin cytoskeleton of stimulated cells and contributes to the actin remodeling response. This image shows a stretch-stimulated fibroblast with F-actin (magenta) and phospho-HspB1 (green) distribution, with codistribution (white) at the ends of actin stress fibers. Studies by Hoffman et al. reported on p. 2661 of this issue of MBoC describe the mechanosensitivity of HspB1. (Image: Laura Hoffman, Huntsman Cancer Institute, University of Utah)