

Effects of Heavy Metals on Calcium Signaling in Yeast (*Saccharomyces cerevisiae*)

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The Marshall lab is interested in understanding the intracellular signals used by cells to respond to stress. One of these signals is calcium, and our lab studies the role of calcium and calcium binding proteins in stress responses and in recovery from stress responses. Stresses studied include heavy metals and other toxicants. The lab identifies potential protein players in the response pathways and then determines their precise role using cell mutants lacking the proteins of interest. The lab uses the model eukaryote *Saccharomyces cerevisiae* (yeast) as the genetics is well understood in this organism.