

Specificity of RNA-binding protein to transported mRNAs in Zachary LeBlanc, Class of 2020

The McBride lab seek to better understand the mechanisms of RNA transport in *Candida albicans*, a pathogenic yeast that causes a wide variety of infections in human patients (Falagas et al. 2006). With few classes of antifungal drugs to treat these sorts of infections and increasing rates of resistance to these drugs, there is a pressing need to identify new targets for potential intervention (Odds et al. 2003). RNA transport fits into the picture because it underlies the transition in cell shape necessary for the yeast to damage host cells. *C. albicans* exists in two main forms: a round budding form that easily spreads through the body and a hyphal form, with projections that can extend many times the lengths of the cell body. The transition from budding to hyphal form requires a complex mix of intracellular signals, but at its most basic level results in the transportation of molecules out to the extending tip where they are needed. Understanding how

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