budding tip (Fig.1). When Pin

My project this summer focused on locating the protein Pin3 in the opportunistic fungal pathogen in order to elucidate Pin3's function in

to a more virulent, elongated hyphal form[1]. In baker's yeast, a related organism, Pin3 induces protein aggregations, which may be helpful to the cell under stress conditions. We wanted to see whether Pin3 might perform a similar role in and whether its location in the cell could impact this role. A previous member of the McBride lab found that Pin3 notably co-purifies with the protein slr1-mut[2]. We were curious if this mutant protein and Pin3 would be fluorescence microscopy was used to visualize the

cells. Pin3 was expected to be located toward the budding tip of the Fluorescence

produced at normal levels, it tends to be dispersed throughout the cytoplasm (Fig.2). In cells with and without Pin3-GFP, slr1-mut was observed in the nucleus, though the tagged protein appeared brighter in cells without fluorescent Pin3 (Fig.3), meaning slr1-mut may be more concentrated in those cells. These results were consistent with localization observed in hyphal-form cells, with Pin3 being observed in bright foci at the hyphal tip in str levels and slr1-mut (Fig.4). No clear co-localization of Pin3 and slr1-mut was observed, tentatively indicating these proteins are not interacting. However, the nuclear location of slr1-mut suggests we may have integrated a wildtype rather than a mutant gene into the genome, given that mutant Slr1 is not typically found in the nucleus[4]. The bright foci of Pin3 seen at the hyphal tip of cells overproducing Pin3 was an exciting observation, though— it could mean that Pin3 is aggregat

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