

## ANTIFUNGAL BIOLOGICS

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Fungal diseases are one of the most common infectious problems associated with humans. People with immune dysfunctions or depressed immune status during clinical treatments often get these infections. For last two decades we have been using chemical drugs which lack target specificity and can induce cytotoxicity at various levels. New age modern drugs of Biological origin as monoclonal antibodies, antifungal peptides, vaccines could be better alternatives alone or in combination with existing chemotherapeutic regime. Monoclonal antibodies in particular are very exciting molecules in immune depressed state; they could be supplied passively in the form of injections as during fungal infection the innate antibodies fall with the rise of infections and are largely non protective. We are making better and more efficient experimental monoclonal antibodies against Candidiasis by Phage Display Technology. Antibodies are the most successful class of Biological drugs against number of dreadful diseases, but none of these molecules exists against microbes. We have standardized Ovine model for the generation of antibodies against fungal cell wall glycans and protein epitopes. Recently we have constructed one of the very first and largest scFv Phage Display Library against *Candida albicans* cell wall antigens. We are working on library screen now to develop specific binding motifs from that will have potent antifungal activity by itself.