

University of Puerto Rico
Chemistry Department
Departmental Seminar

By

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Peptidomimetic antifungal materials: synthesis and characterization, *in vitro* cytotoxicity, and potentiation

The development of new agents to treat fungal infections has become a public health concern. Antifungal β -peptides are synthetic rationally designed peptidomimetic agents of natural antimicrobial peptides that have been reported as a potential platform for treating systemic fungal infections. At present, the route on how yeast responds when exposed to this material is not fully identified, as well as the relationship between the cytotoxicity and physicochemical properties of selected sequences of β -peptides. A keystone in determining preliminary options for improvements on this platform is the characterization of the responses from both mammalian cells and yeasts against β -peptides, to minimize the patient's risks. In this seminar, we present work done thus far in our lab to overcome some of the challenges posed by the main research questions.