



## WELCOMES Dr. Bradley C. Bennett Friday, June 22, 2012 2:00 pm, Chemistry 153



Dr. Bradley C. Bennett, Professor Department of Biological Sciences Florida International University And far too many awards, honors, memberships and achievements to list here.

Title: "Field to Pharmacy: Ethnobotany, Drug discovery, and Validation of Traditional Medicines."

Abstract: Plants provide most of world's medicines and continue to be significant sources of new pharmaceuticals. Yet, botany and medicine remain largely separate disciplines, despite their common history. This makes little sense when one examines the efficiency of ethnobotanicaldirected drug discovery. Using traditional knowledge obtained from indigenous colleagues, ethnobotanists generate hit rates one-hundred to one-thousand times greater than other approaches. These efforts benefit not only the developed world but also the people whose ancestors first discovered the medicinal value of plants. Nonetheless, developing medicines from plants creates unique problems that often confound the pharmaceutical approach. Among these are rampant taxonomic confusion, poorly characterized plant chemistry, within species variation in natural products, and availability and abundance. My lab is interested in three primary questions: What is it?, Is it safe?, Is it effective? We also investigate the mechanism of action of many medicinal plants. Here, I discuss the work conducted by myself in the Amazon and by students in several parts of the world. In particular, I will focus on quorum sensing inhibition by medicinal plants and its importance in treating infectious diseases. Yet, our most important task is preserving traditional medicinal plant knowledge for the people who have no other sources of medicine.

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