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Academic interests: Seed physiology, Plant biochemistry, Plant molecular biology.

Research Focus & Techniques of Expertise: This lab is primarily engaged in engineering horticultural crops for the enhanced production of healthful phytonutrients. Consumption of fruits and vegetables with improved phytonutrient levels will contribute to the overall health and well-being of the population, as many of these compounds have been shown to have beneficial effects in cancer prevention, defense against age-related oxidative degradation, and vascular disease.

Current efforts are/will be focusing on isoflavones in cowpea, and carotenoids in spinach and sweet potato. Our lab utilizes a variety of molecular techniques, plant tissue culture, and metabolite analyses by HPLC and GC.