

Professor Robert A. Raguso

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Robert Raguso grew up as an avid naturalist in New Jersey and studied butterfly population genetics at Yale and Stanford Universities before shifting focus to dissect genetic, physiological and ecological aspects of floral volatile production in *Clarkia* plants for his PhD thesis at the University of Michigan. He again switched fields for his postdoctoral research, studying foraging behavior and olfactory physiology in *Manduca* hawkmoths at the University of Arizona. As a postdoc he founded, organized and chaired the first Gordon Research Conference on Plant Volatiles.

In the last 20 years, Raguso and his students have explored the full range of ecological functions for floral volatiles, from honest signals of nectar to deceptive signals associated with floral mimicry, from both plant and pollinator perspectives. Their contributions include methods of mapping volatile traits onto phylogenetic trees, incorporating floral scent into studies of phenotypic selection, geographic mosaics of coevolution, plant-pollinator network analysis and using floral manipulation such as 3-D printed casting in silicone to track pollinator behavior. As a faculty member (and current chair) of Neurobiology and Behavior at Cornell University, Raguso has focused on the context dependence of olfactory channels in plant-pollinator communication, including abiotic cues such as relative humidity and carbon dioxide as modifiers of olfactory-behavioral responses. Raguso has taught in short courses and workshops around the world, including the biennial Sensory Ecology course in nearby Lund, Sweden. He will initiate a field course in volatile analysis by GC-MS at the Rocky Mt. Biological Lab, Gothic, Colorado in August 2018.