Note to Prospective Students and Post-Doctoral Fellows

Current Research Foci

Quantify Pollination Networks using realistic measures of pollinator importance and model the role of phylogenetic history in shaping these networks (see Fenster et al. 2004).

Quantify the role of fragrance evolution in the diversification of a nursery pollination system (see Reynolds et al. 2012 and Kuhla et al. 2013), with M. Dudash and others.

Quantify the relationship between pollination precision, fitness advantages and rates of angiosperm diversification.

Quantify the role of mutations to standing genetic variation and selection response (see current NSF support).

As you read through the site you will see a reoccurring theme of my research and teaching. Namely, I am interested in quantifying how evolution occurs, by studying evolutionary process at *either micro or macro evolutionary scales* through close collaboration with my students and post-docs and more senior colleagues. The students I mentor may come to the lab with fairly specific research goals (e.g., studying mating system evolution using tropical plant systems) or more broadly defined interests (e.g., an interest in studying evolutionary process). In either case I encourage students to utilize systems that I have some understanding of, including using my past or current study species, although this is not always the case. Sometimes students come to the lab attracted by an ongoing research project (see above research foci) providing ample latitude for independent contribution. Otherwise, during the first year, my goal is for the student to identify their major questions and study organism. I do this by conducting a one on one tutorial, where we identify interesting and answerable research questions. I also try to write review papers with my students within their first 3 years with me, complementing their own work. I maintain an open environment where ideas are freely exchanged. Research questions, discussion of the literature-the conceptual basis of our research- and experimental design are constant topics within the lab. In short, I treat the study of evolution as a grand endeavor, and welcome like-minded individuals to help me explore the origins and maintenance of organic diversity.

As with my students, I treat my post-docs as colleagues. Every aspect of the research, from budget to experimental design, to implementation, to analysis, to writing reflects consensus and joint effort. If you are interested in conducting collaborative research with me, then please contact me well in advance. Writing a grant proposal takes time, and the review process has to also be considered. Although I often have a grant proposal under review that has an undergraduate, graduate student or postdoc, it is also a good strategy to think about writing a grant proposal in collaboration with the mentor, in this case, me.

Please don’t hesitate to contact me or present and or past members of the lab if you have further questions etc.

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