

Department of Biological Sciences

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28 February 2020

To Whom It May Concern,

I am writing this letter in strong support of Jacob Keshtvarz' application for the IAPT Researh Grant. Jacob joined my lab as an undergraduate researcher in the Fall of 2017, and in the lab he learned quickly, worked efficiently, and often came in on evenings and weekends if he felt he hadn't completed as much work as he thought he should have during the week. He joined my lab last year as a Master's student, and has just transitioned to the PhD program. In all of my experiences with Jacob, I have been continuously impressed by his work ethic, intelligence, and maturity. These qualities have only become more apparent since he joined my lab as a graduate student.

Jacob and I discussed several projects during his first semester as a Master's student. The first several were clearly not good fits for his talents, but he immediately took to his current project – a digital morphometric analysis of leaf shapes in the widespread, Neotropical, *Piper arboreum* species complex. Since then, he has generated an enormous amount of data, mentored two undergraduate researchers, and has dug deeply into the literature of *Piper* and morphometrics, as well as methods to analyze morphometric data. He has also become deeply interested in the study system and, now that he has been accepted into the PhD program, he will pursue a number of additional lines of evidence toward understanding the patterns and evolutionary dynamics of the *P. arboreum* species complex, including ddRAD-seq DNA sequence analysis, and biogeographic analysis. Jacob's project is ground-breaking since it will combine traditional taxonomic work with contemporary molecular methods and cutting-edge morphological analyses in a way that has not been done before. Jacob works hard without external motivation, and has taken ownership of the project. He has also proven to be a gifted leader by working productively with undergraduate researchers, and has been successful at breaking off smaller parts of his project, centered around interesting evolutionary questions, and instilling the same interest and excitement in his undergraduate researches that he himself feels about the project.

Jacob has exceeded my expectations on many occasions and, if given the opportunity, would benefit tremendously from the IAPT Research Grant. He is a hard-working, articulate and intelligent student, and I have no doubt that he will excel as a future leader in the field. Without reservation, I give Jacob my highest recommendation.

Thank you for your attention, and please do not hesitate to contact me should you have further questions. I can be reached at 513-556-9784 or at eric.tepe@uc.edu.

Sincerely,

Eric J. Tepe, Ph.D.

Assistant Professor & Herbarium Curator