This dissertation is the result of my family’s efforts and sacrificies over two generations to provide me the education they hoped for. As a first-generation college student, and the only person in my family to receive a doctorate, this is a great accomplishment to us all. I would like to thank my parents for all their love and encouragement, their sacrifices, and for showing me strength. I would also like to thank my husband, Arthur Rudolph, my biggest cheerleader. I love you! The support offered by fellow science moms, RLadies, and our group of academic parents was indispensable. Special thanks to my closest friends, Kristen and Laura, for providing a space to vent and a friendly face when life was too much.

I would also like to specially thank Colette St. Mary, who is not only one of my committee members, but I am happy to be able to call a friend and part of our family. Your support, encouragement, feedback, and endless optimism were crucial for me to write this dissertation. I would like to acknowledge my colleage and friend, Mathew Leibold, who provided mentorship and support during this process, and I am honored to be an unofficial member of the Leibold lab. I would also like to thank my advisors, José Miguel and Bette, for their unwavering support, and my committee members, Miguel and Bob, for their feedback. Last but not least, I would not have finished this dissertation if it weren’t for Amanda Subalusky. You have showed me so much empathy and support, as a mother and a scientist. The motivation and excitement to work with you and your team has truly been the final push I needed to get this dissertation out of the way!