During the period of July 3rd, 2018 until January 3rd, 2019, I was provided with the opportunity to undergo a six-month internship at Len Busch Roses, a greenhouse located in Plymouth, Minnesota. This was my first foray into the world of commercial greenhouse floriculture, and during my time there, I gained a variety of useful skills and experience which will aid me immensely as I move forward in my career. I can’t overstate how valuable this internship experience has been for me, and how thankful I am for the American Floral Endowment’s decision to sponsor me.

Len Busch Roses was founded in 1965 by Len Busch. Since its founding, the company has changed and expanded quite a bit, and their products now include cut lilies, alstroemeria, gerbera, delphinium, snapdragons, and lisianthus, as well as potted plants such as cyclamen, poinsettias, Easter lilies, gerbera, kalanchoe, and begonias. This diversity of plant products was extremely beneficial to my
education, as it exposed me to a wide variety of crops and production styles. Roughly half of my internship was spent working in the cut flowers, and the other half was spent in potted plants. Being able to spend several months working with both types of production was an amazing educational opportunity which has helped develop my overall understanding and appreciation for the field of floriculture.

During my time at Len Busch Roses, I was being trained with roughly the same responsibilities as an “assistant grower”. This meant that many of my duties had to do with preventative maintenance of irrigation equipment (cleaning NutriJet filters, checking/replacing irrigation lines, refilling stock tanks, etc.), managing lily irrigations, data collection (light levels, pH and EC, heights for potted plants), and IPM-related tasks such as scouting, sticky card counting, releasing beneficial organisms, and spraying pesticides. Additionally, there were several times where I would work with the harvester team to perform tasks such as alstroemeria harvesting and thinning, rose disbudding, and planting of snapdragon beds. Being able to work with both the grower team and the harvester team was a beneficial educational experience, which helped me to understand and appreciate the level of coordination that is necessary, both within teams and between different teams, in order to successfully run a large-scale growing operation like Len Busch Roses. It also helped familiarize me with the different tasks that occur at every level of plant production.

One of the most valuable skills that I developed during this internship was a strong safety ethic. At Len Busch Roses, they take safety extremely seriously, and go above and beyond to ensure that their
employees are staying safe and healthy. As pesticide application was part of my regular duties, and also something that was new to me, I had a few concerns. However, in addition to the training that I received on PPE and chemical safety, Airen, an experienced pesticide applicator and one of the assistant growers who I worked most closely with, took the time to answer all of my questions, helped address any concerns I had, and provided me with the knowledge and resources I needed to stay safe. I am extremely thankful that I started my career by working at Len Busch Roses, as their emphasis on safety has been strongly instilled into me and is something I will continue to carry with me as I move forward in my career.

The knowledge of IPM programs that I gained was also extremely valuable to me. I gained experience with the decisions that go into an IPM program, such as which organisms to use for specific purposes and how data from scouts and card counts are used to plan applications of pesticides and bios. In addition to IPM knowledge, I gained a variety of other specific skills. Irrigation of crops was a large part of what I was responsible for during my time there. I was primarily responsible for irrigation of the cut lily crop, but I also spent some time learning how to irrigate the potted plants using flood trays. Learning different irrigation strategies and independently making irrigation decisions really helped me develop my skills as a grower. One challenge I faced in irrigating was attempting to overcome my tendency to grow things on the wetter side. As this can increase the likelihood of root disease, they typically try to grow things drier at Len Busch Roses. It
took some getting used to, but refining my irrigation strategies and figuring out how to be an effective dry grower will help me quite a bit going forward.

During my second month at Len Busch Roses, I was given the opportunity to take on an independent quarterly project. For my project, I tested the effectiveness of various PGRs on sample crops of alstroemeria and potted chrysanthemum. For the alstroemeria, I was attempting to identify ways in which I could increase profitability through increased stem number, and for the chrysanthemums, I was attempting to increase branching in order to minimize the need for mechanical pinching. Having the opportunity to independently plan and execute a project was extremely beneficial and enjoyable, and provided me with a lot of experience in the use of PGRs.

Overall, this experience has massively impacted my future and my career goals. Having the opportunity to apply what I have learned in class and experience what commercial greenhouse floriculture is like has helped me confirm that this is the right career path for me and helped me identify which aspects of greenhouse floriculture I enjoy the most. Len Busch Roses was the perfect place for me to gain the skills and knowledge that I need to feel confident and be successful in this field, and I am very thankful to them for hosting me and teaching me these skills. I would also like to sincerely thank the American Floral Endowment for selecting me for this internship and for the assistance they’ve provided me throughout this process.