

Student Employee of the Year

Submitted: February 3, 2023 Nominator Ben Abbott Assistant Professor 801-319-3062

Nominee

Heidi Wilding Plant and Wildlife Sciences Lab Assistant

Communication

Heidi is the lab manager of our large, interdisciplinary research and service lab (benabbott.byu.edu). She has represented our lab, the Environmental Science & Sustainability program, and the university at multiple regional to national events. Heidi is an outstanding ambassador who is able to read her audience and adapt her message to their needs and level of understanding. In early 2022, she chaired a panel that introduced BYU's office of sustainability to President Worthen, showcasing how service learning can enhance student experience and make a real-world impact long before graduation. Heidi has presented our lab's research at the Salt Lake Symposium, Utah Lake Symposium, and Society for Freshwater Sciences. She is regularly mistaken for a graduate student or postdoc, given her deep mastery of multiple subjects and effective listening to concerns and questions. If I had to bow out of a major plenary talk, I wouldn't hesitate to ask Heidi if she could stand in for me.

Digital Technology

Heidi operates and maintains a large suite of technical equipment, including a computer lab, an ion chromatography system, a scanning fluorometer, and an elemental analyzer. She has developed a relational database in SQLite, allowing us to analyze and share thousands of environmental chemistry samples each year. Not only has she learned how to run the complex systems, she conducts routine maintenance and emergency repairs. She has saved the lab tens of thousands of dollars by troubleshooting issues that would have otherwise required a site visit by a professional technician. She has also used digital communication platforms to great effect, including coordinating multiple field and lab teams over multiple communication platforms.

Problem Solving

Heidi joined the lab just before the COVID-19 pandemic. Faced with major disruptions, she helped create an environment of Christlike comradery and solidarity. She used shared documents and regular updates to

coordinate our remote work, paying attention to the most vulnerable and new students, in particular. During the pandemic, one of our major analytical systems completely broke down. Heidi worked with the manufacturer's staff to identify potential problems. Because of turnover, she was given completely incorrect guidance, but after testing, she identified that it was a computer hardware issue unrelated to the analytical system. She reinstalled the operating system on another machine, swapping out hardware and getting the system running again. Not only did Heidi do a better and faster job than I (or the professional staff) could have, she did it with minimal support and oversight.

Professionalism

Heidi is a completely independent worker who is able to balance multiple tasks and team priorities at the same time. One example of how she can deftly keep multiple balls in the air is how she dealt with our recent influx of undergraduate students. Our program has experienced major growth over the last two years. Heidi's main responsibilities are to keep the lab up and running, but she saw a need and volunteered to help expand our student mentoring capacity. She developed procedures to onboard students, including the creation of intuitive training videos, forms, and compiling resources for orientation. This allowed us to grow from ~10 mentored research students per semester to around 30. This is typical of Heidi's work ethic—she is always looking for ways not just to fulfill her responsibilities but to magnify the impact of her service and bless the lives of others.

Intercultural Fluency

Heidi has supervised students from all over the world, including Peru, Iran, China, Mexico, and many states across the US. Her sincere interest in each student and colleague created a welcoming environment that has supported students from all cultural backgrounds. When there was a conflict between one of the international senior members of the lab and collaborators from another university, Heidi helped facilitate communication and eventual reconciliation. This greatly reduced the wasted energy and emotional damage that could have occurred if the misunderstanding was left to fester. More generally, Heidi has drawn on her own positive and negative experiences from theater, community advocacy work, and science to provide insightful and loving feedback for struggling students and professors (myself included).

Career Management

Heidi has shown an extraordinary ability to prioritize her time and effort towards professional development (her own and members of our lab). She has cultivated relationships with external collaborators from around the country, and is regularly called on to provide technical help and recommendations. While she has never been self-serving, the network she has created will be a major asset as she seeks continued education and employment. She has become involved in six studies that are on track to be submitted for peer-review in the next year. She has successfully secured thousands of dollars of grant money to support her and other students' research and scholarship. These are exactly the kinds of skills that will set her apart after graduation and reflect positively on the university.

Leadership

Heidi is the kind of person you can rely on to step in at a moment's notice. When I ended up stranded on a mountain while collecting snow samples, Heidi picked up the phone and offered to teach my lab class that day. When plans change or priorities need to be reevaluated, Heidi is bold, dauntless, but still compassionate. For lab meeting one week, she prepared a "how and when to say no to good opportunities", drawing on church

resources, business practices, and her own experience. Her example of Christlike leadership has changed the way I recruit and mentor students. She is able to lead and manage students for weeks at a time with little to no input or supervision from me. At the same time, she is never timid in reaching out when a student is in crisis, or when the productivity of the lab is at stake.

Teamwork

As extraordinarily gifted as Heidi is, her work is never about herself. I believe this stems from her practicality and moral beliefs that when we work together we will accomplish more and in a better way. Since joining our lab group, Heidi has mentored more than 50 students, helping them learn complex tasks and complete tens of thousands of professional-level analyses. She has overseen dozens of lab and field expeditions, transitioning seamlessly between supervisory, supporting, and background roles. The students around her have been inspired by her love and leadership, creating a strong and dynamic team. I am so grateful for Heidi's example and believe she will be one of the most influential students to graduate from BYU. She epitomizes the purposes of a BYU education and provides a model for all of us to draw closer to God and accomplish His purposes through disciple scholarship and service.