

Mentored Research Catalyzes Career Interest

In 2021, Chapman University in Orange, California won its first Beckman Scholars Program award. Although COVID-19 was disrupting bench work in university labs across the country, Scholar recruitment for the program continued, and resourceful undergraduate researchers and their mentors looked for creative ways to carry out projects safely.

One year later, as pandemic restrictions shifted and lab work was restarted, Benjamin Janda's interest in the program grew.

"I was motivated to apply for Beckman because I knew that it would be an extraordinary experience to advance my research abilities [and] scientific skills," he explained. "By the time I applied to the program, I knew that I wanted to enter a research-based chemistry PhD program. In these programs, learning to direct your own research is crucial and I knew that if I won BSP, I would be able to gain that skill as well as scientific communication from conferences."

Growing up in San Jose, California, Janda was surrounded by his mom, dad, and younger brother. His family had always emphasized the value of education. His mother's parents were Argentinian immigrants, and she was a first-generation college student. Together, they instilled a strong work ethic in the family, both in school and on the job. Janda took it to heart and applied it to his time in the lab.

"My research project involves the study of catalysts. Catalysts are used across all industries to initiate and/or speed up chemical reactions used to synthesize pharmaceutical compounds, create synthetic polymers, refine oil, and perform many other important chemical transformations," he shared. "Historically, many catalysts used in these processes are expensive transition metals such as gold or platinum which are expensive and energy efficient. Over the course of my time in BSP, I have investigated carbodiphosphoranes, a class of organic molecules that can be used as greener replacements to these traditional metal catalysts."

Participants in the Beckman Scholars
Program have unique opportunities to pair
with faculty mentors for 15-month research
experiences. For many, that time can be
transformative and help crystallize their
future career plans, and the mentor
relationship enables them to gain the skills
and confidence to pursue those goals.

"I am extremely grateful to have Dr.
Liberman-Martin as a mentor through the
BSP process," said Janda. "They have greatly
supported my development as a chemist
and have helped me to achieve
independence in the laboratory. If not for
their mentorship, I could not have gained the
skills I did during the program. Additionally,
they constantly encouraged me to apply to
many different conferences and
opportunities, such as the ACS national
meetings which have also developed my
ability as a scientific communicator."

Janda intends to carry those new skills into a research-based graduate program and eventually into a career in drug design within the pharmaceutical industry. This fall, he'll start his chemistry PHD program at the University of California, Los Angeles.



Ben Janda stands in the Liberman-Martin lab at Chapman University. Image credit: Chloe Melanson

