



Luis Maldonado

"One of the things I like about mentoring is that you as the mentor need to learn more than your students."

Luis Maldonado, Ph.D. student, Food Science

THE STUDENT: As a 17-year-old high school student in his home country of Honduras, Luis Maldonado participated in a class field trip to a shrimp processing plant. The tour sparked his interest in food science and his application to the Zamorano Pan-American Agricultural School near the Honduran capital of Tegucigalpa. After earning a bachelor's degree in Food Science and Technology, Maldonado worked for three years as a technical advisor for food processing companies in Honduras. During a six-month internship in Urbana-Champaign, Illinois, he researched U.S. graduate programs and chose Purdue for the College of Agriculture's reputation and academic rigor. He joined Professor Jozef Kokini's lab team at the Whistler Center for Carbohydrate Research, located within Food Science, in fall 2013. Maldonado helped set up the lab, ordered many of the instruments, and spent a year familiarizing himself with the equipment so that he could effectively train others to use it. Kokini's professionalism and availability influences his own research, Maldonado says. "He has several meetings per week so we can discuss our research. He gives us a lot of time."

THE RESEARCH: Maldonado's doctoral research focuses on the development and characterization of nanomaterials and encapsulation of bioactive compounds. The fabrication of bio-nanomaterials is interesting but chemically challenging to work with, he says. The goal of encapsulation is to increase the low bioavailability of the bioactive compounds, he explains: "If you consume them, the body basically disposes of them. Encapsulating them makes them

more available or kept in the body longer so the body can process them."

PATHMAKER AWARD: The Pathmaker Award honors graduate students who have distinguished themselves as mentors and peer coaches, and Maldonado is the 2016 recipient. The student who nominated Maldonado for the award has benefited from his guidance initially as an undergraduate and now as a Ph.D. candidate in Kokini's lab. Maldonado has mentored five international students (only one was Spanish-speaking). His nominator wrote: "Instead of simply telling me what to do, he taught me so much more, ranging from the usage of instruments, the scientific knowledge related to my research, how to read scientific papers, to the method to independently think about the results of experiments, how to plan research in a timely frame, and how to balance learning and working. He was such a good mentor that I felt I was taking a course called Be An Independent Researcher, and he was the instructor for both lecture and lab sessions of the course." Maldonado says he was "really surprised" to receive the award.

FUTURE PLANS: Maldonado hopes his experience in both industry and research might lead to varied career choices after he completes his degree in fall 2017. "There is something in teaching that I like," he says, but will choose a direction in the coming year: "Everything depends on the opportunities." In his spare time, he is an enthusiastic soccer and wallyball player who enjoys Purdue's intramural leagues.