Nadia Atallah

“I use a mixture of computational biology and molecular biology in my research. Computer work and bench science — I really love that combination.”

Nadia Atallah, Ph.D. candidate, Department of Botany and Plant Pathology

THE STUDENT: Nadia Atallah is a homegrown researcher, the daughter of a Purdue computer science professor who claims West Lafayette as her hometown. Her interest in plant research evolved from her undergraduate biochemistry major at the university. “I started looking into plant science because that’s where a lot of the jobs in the Midwest are,” she explains. In searching out her best fit for graduate study, Atallah thoroughly read through the varied plant science research projects underway at Purdue. She was drawn to the work of Professor of Botany and Plant Pathology Jody Banks, whose lab focuses on the biology of lower vascular plants. “I really look up to Jody, and she’s incredibly enthusiastic,” Atallah says. “I also feel comfortable voicing my opinions, so we can have actual conversations about the science. I feel like I learn much more that way.”

PLANT SEX MATTERS: The many different mechanisms that determine sex in plants raise just as many developmental questions. And therein lies the importance of her work, Atallah says, even though “her” fern has little agricultural value. “Sex in plants is very important in general, but we do not understand very much about how sex determination in plants occurs,” she explains. “You can’t just study one type of plant. We’re really contributing to the body of knowledge.”

AT HOME AT PURDUE: The combination of a strong plant science program, well-respected scientists, and top-notch greenhouses and computational facilities has kept Atallah at her alma mater. The research also suits her curious nature: “I’ve always been someone who likes to know why things happen,” she says. “I want to know why and how sex is determined, what the molecular mechanism is. It’s like a puzzle.”

WHAT’S NEXT: Atallah is working toward a May 2015 graduation and keeping her professional options open, although “I know for sure that I want a position that’s primarily research-based,” she says. Outside of the lab, the classically trained violinist also loves bluegrass and looks forward to the annual Indiana Fiddlers’ Gathering. And in addition to preparing for her own career beyond academia, she is training one of her three dogs, a collie named Watson, for therapy work.