

EXPERTISE CULTIVATED

Childhood in Colombia shaped research botanist Tatiana Arias' career

As a child, Dr. Tatiana Arias and her brother would visit their father on vacations in the jungles of Colombia, where he had moved to start a new life. It was both frightening and exhilarating, as their dad would have the kids take off their shoes and walk barefoot in the wild environment. Arias found herself drawn to the expansive, exotic natural setting, and the visits would have a lasting impact on her.

They helped set Arias on a path to becoming a biologist, tied to her fascination with the biodiversity in her native country. The journey led her to study, research, and teach the subject at the university level, both in Colombia and the United States, and ultimately brought her to Selby Gardens late last year as a top-tier research botanist focusing on Neotropical orchids.



Tatiana Arias (center) in the field in Colombia with students and community members

SOCIAL MEDIA

Want to keep up with Dr. Arias' research and travels (and the latest memes from Colombia)? Follow her on Twitter at [@TatianaAriasGar](https://twitter.com/TatianaAriasGar).

The thrust of her research at the Gardens is to understand the diversity and evolution of Neotropical epiphytic orchids, with a particular interest in the evolutionary processes and patterns that have given rise to that diversity.

Two years ago, while the pandemic was still raging, Arias saw a job posting for Selby Gardens on the Botanical Society of America website. She had returned to work in Colombia in 2015, after earning her master's degree at the University of Tennessee, getting her doctorate at the University of Missouri, and doing postdoctoral research at the University of Hong Kong. She instantly felt a connection to the position. "I felt like the job was waiting for me," she said.

Three months later, she interviewed long distance with Bruce Holst, Selby Gardens' vice president for botany. It went well, and after a series of interviews, Arias was hired—even though it took nearly a year for her special visa and the lengthy documentation to be approved. "I think my application was like 900 pages!" she said.

The story of Arias' travels and experiences could fill that number of pages as well. She grew up during a dangerous time in Colombia's history, marked by frequent and random violence from the drug cartels that were once so prevalent in her country. In fact, her mother was seriously wounded when a bomb detonated in the streets of their hometown—and, compounding the terrifying experience, Arias actually saw her mom on TV being carried away by police. She survived, but the moment underscored the daily perils citizens faced at the time.

Arias was admitted to the biology program at La Universidad de Antioquia in Medellin, and she became one of the department's top students en route to earning her BS in botany. That launched her distinguished academic career. She arrived in St. Louis—speaking not a word of English—for a one-month fellowship at the Missouri Botanical Garden. That opened the door to her formative educational experiences in the U.S. and Asia.

Arias returned to Colombia to work as a research group leader at a bioinformatics center, and as an associate researcher for the Colombian Orchid Society. Along the way, she earned the Colombian Young Scientists Prize in 2017 from the World Academy of Sciences, gained extensive teaching experience, and published numerous peer-reviewed articles. And she continued to excel and build her reputation as a world-class orchid expert—leading to her joining Selby Gardens last fall.

"I really love being here and working for such an amazing place as Selby Gardens," she said. "[Late Selby Gardens orchid expert] Carlyle Luer's legacy is huge in the orchid world in Colombia, and it is a great opportunity to continue contributing to what he built. Plus, it's nice to be able to continue with my projects from Colombia."