

SPOTLIGHT: THE UNDERGRADUATE RESEARCH EXPERIENCE



What is your current position and how did you get to where you are?

I am **Mike Martinez**, CEO of Natural Plant Products, and its parent company, OMG, a cooperative of 50 family farms in Oregon's Willamette Valley. My first role with the company was to work with the consultant in charge of manufacturing and research, and from there I progressed through sales, operations, and into the CEO position.

What made you decide to do research as an undergraduate student?

Seniors at Willamette University are required to complete a capstone or thesis project as part of degree requirements. This began with the development of a proposal in the fall semester, followed by research and a formal presentation in the spring. The initial results of my work were of continued interest to both my advisor and I so we opted to continue the work over the summer after graduation. This provided me the opportunity to work full-time on the project and prepare a manuscript for publication. It also gave me perspective on what pursuing science as a professional would entail.

As an undergraduate researcher, was there a particular incident that stands out?

The senior thesis experience was highly impactful. While I had developed laboratory and research skills during the course of my education, the thesis work challenged me to develop a deep and intimate knowledge of a specific addressable area, in my case the analysis of hop-derived compounds in brewing. We not only had to defend and pitch our project in writing, but also defend the proposal and eventually the research in a symposium setting.

How did undergraduate research affect your career choice?

I sometimes joke with colleagues and friends that the remarkable opportunity to pursue my senior research after graduation led me to understand that I was not suited to a full-time lab position! However, knowing this as I started my job search led me to identify opportunities that would allow me the opportunity to pursue research as part of the job, but in balance with other aspects of business such as sales, administration, and customer service.

Did you publish your research as an undergraduate, and if so how did that experience serve to encourage you?

My advisor and I published a paper that was based on my senior thesis project. We spent the summer post-graduation rounding out some of the questions that arose during the spring semester. Going through the publication process deepened my knowledge of the process of peer review, but more importantly, gave me a great sense of confidence in navigating the unknown. I've spent my career in small business and there is no shortage of challenges for which you might seem unprepared. Confidence and leadership is often the realization that you are the best one suited to the task.

Any final thoughts?

Research moves science off the page and into the real world. Lab skills are vital, but only performing prescribed experiments leaves some skills undeveloped. Pursuing original research requires not only lab skills, but equally important, requires the researcher to communicate their ideas. You may well be the only one to develop knowledge in an area, and you will need to help others understand. I've been the CEO of our organization for close to ten years, and can say without question that written and oral communication skills are the top skills we consider in candidates. Our technical staff can teach scientists the chemistry of vegetable oils and cosmetic formulations. We need graduates to bring to bear the ability to learn and communicate.

