

Calculating Minds Find New Passion In Business

Original article appeared as a University of California Alumni Profile and was published at <http://cnas.ucr.edu/~cnas/focus/brithinees.html>
Reprinted with permission. All rights reserved 5/1/2002



Donald (front) and Wallace Brithinee

It would require someone with the math skills of Wallace or Donald Brithinee to determine the odds: identical twins each earn three degrees in math from the same university, graduating in the same years, and then work together for the next 28 years as business partners.

Improbable as it might seem, this is the story of the co-owners and officers of Brithinee Electric Inc. of Colton, California. The company started by their father in 1963 manufactures electric controls and repairs industrial electrical motors for thousands of customers in the southwest United States.

It is now one of the largest such companies in the Inland Empire. An example of their work can be found at UCR's Coachella Valley field station. Brithinee Electric built the control station used to regulate the irrigation system on the 540-acre property.

The brothers took over when their father retired about 20 years ago, dividing managerial responsibilities between them. Wallace serves as president, overseeing the motor shop and its 30 employees. As vice president, Donald manages the other 20 employees and is in charge of finances, sales, and marketing.

The brothers began working in the business as teens attending Fontana High School. Graduating when 16 years old with a year's worth of community college credits under their belts, they decided to pursue college degrees in math, their favorite subject since junior high.

"I always enjoyed mathematics," says Donald, "especially abstract mathematics as opposed to applied mathematics."

"Abstract math was much more interesting than, say, physics, which used the math," Wallace explains. "Abstract math comes from a different logical perspective. It more mirrors philosophy than physics, hard science, or engineering."

Even while attending UCR full time they continued to work with their father. They oversaw the expansion of their company's facilities to a second building on South Rancho Avenue during their years at the University. In spite of their business commitments, they graduated summa cum laude with bachelor of science degrees in 1968. Two years later, they had earned master's degrees. In 1971, they received their doctorates—at age 22.

Although Wallace and Donald taught math at UCR while receiving graduate fellowships and enjoyed the intellectual stimulation of academic pursuits, both agree that the challenges of running and growing an industrial business proved to hold a stronger attraction to them than a purely academic career. And even though they don't use number theory or differential equations to run their business, they give a lot of credit to their education for their success. For one thing, they have participated on such government policy groups as the California Air Resources Board, the California Energy Commission, and the White House Office of Science and Technology Task Force, where they discuss energy and pollution issues as well as industry concerns. "Without a Ph.D, you don't even get invited to the table," Wallace explains.

Donald adds that the challenging UCR experience gave them the desire and ability to do their best. "I think our education provided us a chance to excel, not just succeed," he says. Their company's written mission statement reflects their continuing desire to go beyond merely satisfactory. The objective is "to delight our customers by delivering products and services of superior quality, thereby raising their expectations."

"One of our new customers has a steel recovery business. When receiving our product, an electrical control panel, he said it was better than he had been expecting," says Donald. "I told him, 'Great, then we've met the goal of our mission statement. Our intention is to elevate your expectations, not just meet them.'"

The brothers act on their advocacy for education as UCR alumni leaders and active supporters of several local schools. Donald is a member of the UCR Foundation Board of Trustees and was on the UCR Alumni Association Board of Directors from 1974 to 1985, serving as president in 1980-81. Wallace has participated in the Chancellor's Roundtable and regularly attends University events held near his home in Palm Springs. Together they have established and support the Brithinee Scholarship for returning UCR Alumni Scholars. In the Inland Empire, their contributions include assisting the faculty and students of the Integrated Manufacturing Academy at Fontana High School, which helps to prepare students for skilled manufacturing jobs. They also readily agree to be studied periodically by a local California State University professor who writes up management cases for university textbooks (which explains why a Web search of the company name turns up a site for a strategic management course offered by the Middle East Technical University in Turkey).

While their management methods are studied worldwide, the Brithinees think they provide a better model for young people here. "If we are an example of anything," says Donald, "it's the opportunities that public education in this country can provide."