

Engineering New Paths to Entrepreneurship

Muzzy gift fuels a campus-wide culture of innovation.

As you're reading this, a University of Arizona biomedical engineering major might be making the initial sketches for a revolutionary medical device. A young woman in aerospace and mechanical engineering could be working out the physics of a drone design with untold commercial potential. A computer engineering savant could be perfecting low-cost, consumer-friendly ways that dramatically improve the security of mobile phones and tablets. As passionate innovators, all these students might feel as much at home in entrepreneurship as in engineering, and a gift from the Muzzy family will make it easier for them to combine those studies beginning spring 2018.

As it stands today, the top-ranked McGuire Entrepreneurship Program – a lockstep, two-semester experience through which students learn the process of innovation by developing a start-up business – is already open to any student on campus. About one in three of the program's nearly 100 participants pull from other colleges. Historically, those non-business students who have found their way to the McGuire Center for Entrepreneurship have had to forge their own paths. Now, McGuire Center Director Remy Arteaga hopes to create those pathways for them, at once making cross-college journeys both better known and more easily undertaken.

In part, the challenge is one of logistics. Meeting requirements for an engineering degree – any degree, for that matter – is no piece of cake. Heap on the internships and extracurricular activities expected by today's employers and the prospect of undertaking entrepreneurship studies unconnected to your major or minor can seem an insurmountable climb.

To that end, the McGuire Center is working with the College of Engineering, Student Services and other units on campus to make those opportunities more accessible

L and R: McGuire Entrepreneurship teams in the Jim and Pam Muzzy Entrepreneurship and Innovation Lab; C: UA engineering students in laboratory.



to all students, from freshman through senior year. For example, engineering students already complete required senior design projects. Could those projects be modified to offer tracks that integrate entrepreneurship studies? Teams are planning entrepreneurship-oriented activities for engineering freshmen and sophomores, and a new elective for engineering juniors will address entrepreneurial process in technology and product design.

Value beyond new ventures

Behind the drive to expand entrepreneurship education is an understanding that its value extends well beyond new ventures. “The reality is that innovation takes place outside and inside of companies, what’s sometimes called ‘intrapreneurship,’” Arteaga said. “Fundamentally, we’re teaching the process of creating change, and that’s a set of skills that can benefit students in any field.”

Engineering was a natural first foray in this latest effort to broaden the reach of Eller entrepreneurship, not only because innovation is the beating heart of the field but also in light of close ties between Eller Dean Paulo Goes and College of Engineering Dean Jeffrey Goldberg. However, the initiative should be seen as a pilot program, Arteaga said, building a model that can be adapted and implemented for other disciplines. The College of Agriculture and Life Sciences and College of Social and Behavioral Sciences have also expressed an interest in bridging to entrepreneurship, and Arteaga envisions an entrepreneurship minor for business and non-business students alike in the not-distant future.

“Fortunately, the culture here is uniquely positioned to accomplish things that other universities would have a difficult time doing,” he said, noting that most campuses are hampered by a natural “soling” that cuts off their centers of excellence from one another, each with an exclusive geography, culture and citizenry. “The leaders here at the University of Arizona really do have the desire and the traits to work together in a way that allows us to create change across campus. Frankly, that’s very unusual.” Just as unusual is the work itself. “What we’re doing here is very entrepreneurial,” Arteaga said. “We’re on a path to implement a lot of things that have never been done before – here or elsewhere.” – *Martha Retallick*



“An idea is just the beginning.”
- Jim Muzzy



THOMAS VENEKLASEN PHOTO

A Legacy Built on Innovation

The Muzzy family has long helped advance entrepreneurship at the Eller College. The James and Pamela Muzzy Chair in Entrepreneurship

is one of three endowed chairs at the McGuire Center, and the Jim and Pam Muzzy Entrepreneurship and Innovation Lab (pictured to the left) gives students a dedicated space for entrepreneurial collaboration. The Muzzy family also funds the annual Entrepreneurship and Innovation Initiative, which established a required course in entrepreneurship for all Eller seniors, something almost unheard of in American business schools.

Jim Muzzy’s (MBA ’63) interest in Eller entrepreneurship dates to the mid-1980s, when his friend and former Tucson High School classmate, Karl Eller (BSBA Marketing ’52), gave the McGuire Center — then the Karl Eller Center for the Study of the Private Market Economy — its founding gift. Muzzy flexed his own entrepreneurial muscle in 1971 when he and two partners co-founded Pacific Investment Management Company, which currently manages more than \$2 trillion for governments, foundations, institutions and individuals. Before retiring in 2009, Muzzy had helped grow the firm into the preeminent company in the field of fixed-income investment management.