

Bridging Innovation and Entrepreneurship

SEAS professor to serve as Tsai CITY's new faculty director

On September 1, Anjelica Gonzalez, associate professor of biomedical engineering, took over as the new faculty director for Tsai Center for Innovative Thinking at Yale (Tsai CITY). Launched in 2017, Tsai CITY works to inspire students from diverse backgrounds and disciplines to seek innovative ways to solve real-world problems.

Much of Gonzalez's research has focused on how to build better engineered models of human tissue as a way to explore immunology, inflammation and fibrosis. Her work has led to the development of new technologies, such as PremieBreathe, a low-cost, mobile neonatal respiratory device that's being used in underserved and low-infrastructure environments across the world. Her long-running course, Biotechnology and the Developing World, looks at how life-improving technologies can be implemented in resource-limited environments. All of which makes Gonzalez a natural fit for Tsai CITY.

"I've come to realize that everything I do at the university, whether it's the research, the teaching or the service, has been human-centered," she said. "I think Tsai CITY is the same way. It really takes advantage of thinking about humans — in this case, that's the students — and what they need to use their innovative thought processes to produce something. The focus is on what the student is bringing and then giving them the resources to enact that in a meaningful and productive way."

As faculty director, what do you do?

When I was invited to do this, they told me that the faculty director is there to be the thought leader for the center and, specifically, advisor to the executive director. So I provide a hands-on link between Tsai CITY and the faculty and the students across the university.

I'm integrated at the university at a couple of levels — the administrative level, interacting with the provost and deans, but also as a faculty member interacting with students — so this gives me the opportunity to talk to the executive director and the staff at Tsai CITY about where we can really enhance resources for students and how to best engage with students to make sure they're taking advantage of every opportunity to further their entrepreneurial aspirations.

Tsai CITY is still in the third year of its operation, and they've done such a great job with it. But with something so young, there's always the opportunity to see where we haven't taken full advantage of the collaborations across Yale and the partnerships that Yale inherently brings from the outside.

What are some of your goals?

I see my role as contributing to some of the already recognized work that Tsai CITY has done in being a leader in the diversity, equity, inclusion — particularly around innovation and entrepreneurship for students. Last year, Venturewell, an organization that supports students' start-ups and global health entities, identified Tsai CITY as 9th out of 100 of the

Continued →



Yale

47

“For the students at Tsai CITY, the ability to engage with experts of many fields, including other students, provides the best opportunity for success.”

› Anjelica Gonzalez

most innovative institutions promoting equity and diversity. I see my role and everything that I bring to it in regard to diversity and inclusion as taking advantage of where Tsai CITY already is, and taking that even further. We’ll bring in mentors and advisors who are diverse in their skill sets, ethnicities, abilities, genders, sexualities — we’ll bring all of that to Tsai CITY in a way that hasn’t been done yet.

Another goal is specific to Engineering. Being one of the Engineering faculty, I want to make sure that faculty and students are well aware of everything Tsai CITY is doing and are taking advantage of those opportunities. Engineering students are innovative in their thought processes. They’re entrepreneurial and they’re willing to take the risks required to develop start-ups. With Tsai CITY they can build a skill set in business modeling or busi-

ness development, which is key to developing a successful device, product, or business.

Tsai CITY’s building neighbors the Center for Engineering Innovation & Design (CEID). How do you see the two working together?

I view the CEID as the place for students to come in and prototype and build out their models, build out their ideas and get them to fruition. Tsai CITY is really about getting students accelerated in the process of understanding what it takes to get those prototypes and ideas to the next level, to build the networks required to take something out of Yale and have it out in the world. So I think they are linked — they’re part of the package that’s required for getting something from the mental innovative state to getting it out into the real world.

As an engineer, how do you plan to work with those outside your field?

The people of Tsai CITY really push to make sure that all students feel welcome. That means it is inherently providing multidisciplinary expertise to students as a resource. However, the success of Tsai CITY is also dependent on the multidisciplinary nature of students who become engaged, giving breadth to the types of projects that are supported. I relate to this idea, because I’m an engineer, meaning that I can create things in the lab, but I also know what I don’t know — and I don’t know the clinic, I don’t know patients. Success of my research requires that I look for that clinical expertise elsewhere. Success in almost any sector now requires a multidisciplinary effort, and it’s the same thing with my own entrepreneurial efforts. With the PremieBreathe project, I can’t be a CEO

because I don’t know anything about leading a business start-up, so I work with Yale’s Office of Cooperative Research, and with the School of Public Health to find the expertise to lead a project like that. For the students at Tsai CITY, the ability to engage with experts of many fields, including other students, provides the best opportunity for success.

A multidisciplinary approach is also applied when we look outside of Yale, at partnerships with industry mentors who engage with students. We’re looking at people who are CEOs of major companies who can lend some business savvy to these students, and some business resources to them. The goal is to acquire the resources and the knowledge that we can harness for the benefit of the students. 🏛️