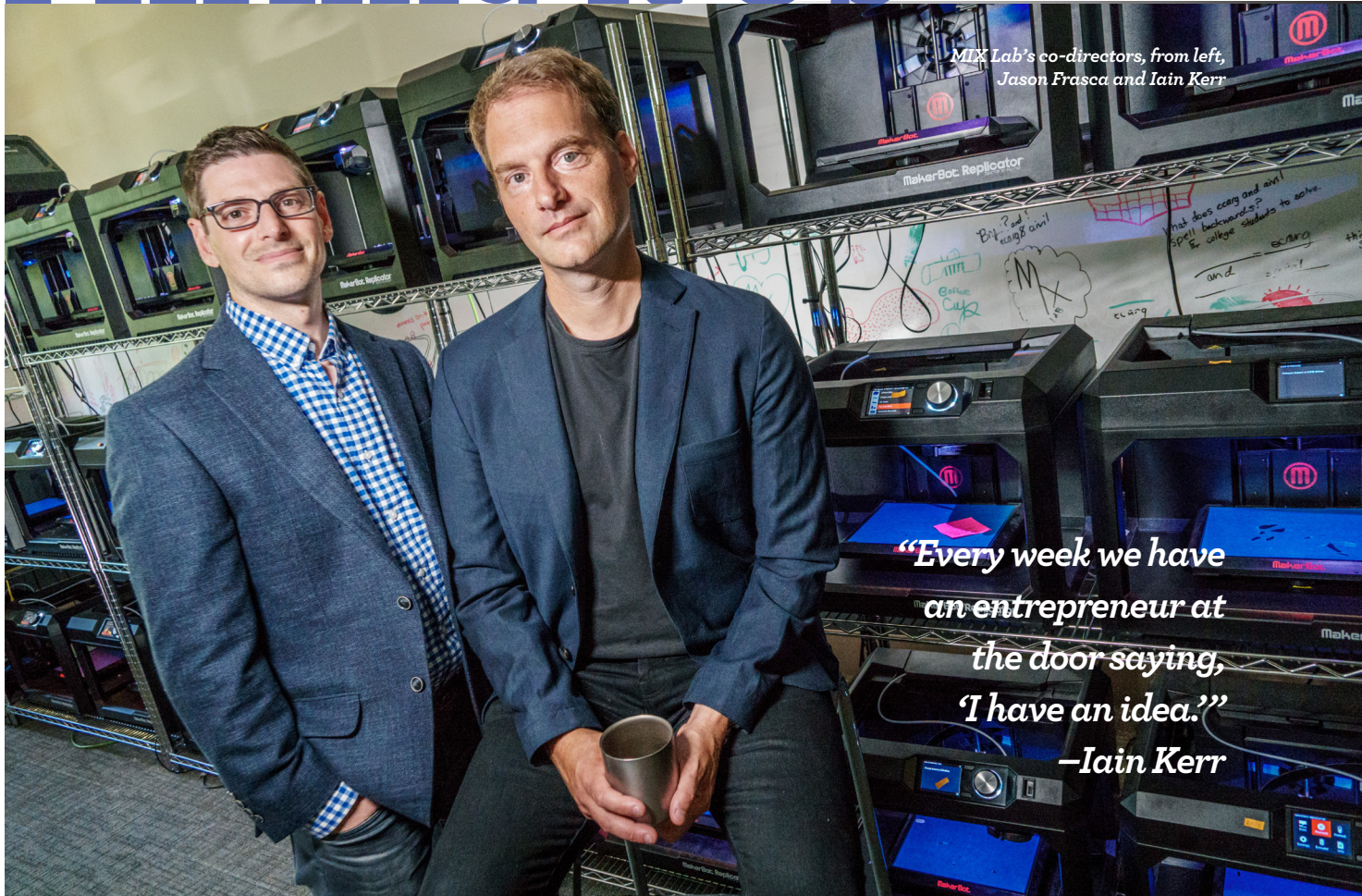


# MIXing it Up



MIX Lab's co-directors, from left, Jason Frasca and Iain Kerr

*“Every week we have an entrepreneur at the door saying, ‘I have an idea.’”  
—Iain Kerr*

## 3D printer lab is open to students across disciplines

What do mathematical models, medical imaging, shoes, ear buds, a toothbrush, lamps, dishes and a 6,000-piece dress have in common?

They are just a handful of the 2,500 ideas brought to life this year through 3D print technology at Feliciano School of Business' MIX Lab.

With 35 cloud-based 3D printing devices on site, MIX Lab is one of the largest university-based 3D printing facilities in the country and one of the first housed in a school of business. Since opening in August, Montclair State students from 23 different majors have taken advantage of the new technology by enrolling in the 9-credit 3D Printing Certificate in Digitally Mediated Innovation Design, says Iain Kerr, co-director of the lab.

“Suddenly we’ve activated an interdisciplinary way for students to realize their vision – from

math students to fashion design students – whatever they are thinking of, we help them make it,” Kerr says. “Students are coming up with entirely new ways to think about textiles and infrastructure. Silos have been broken; creativity has taken off.”

More than a student resource, MIX Lab also collaborates with regional small and mid-sized manufacturing companies on innovation research.

A November workshop the lab hosted with the NJ Manufacturing Extension attracted eight companies to campus, said Jason Frasca, who co-directs the lab with Kerr and is an entrepreneurship instructor.

“Every week we have an entrepreneur at the door saying, ‘I have an idea. It’s prohibitive cost wise or I don’t know how to do the design,’” Kerr says. “We assign them a student. The student learns design and entrepreneurial skills and they work on the product together.”

One such entrepreneur is Charlie, a retired aerospace engineer with three degrees who exited his field just as computers entered it.

After attending the MIX Lab open house in February, he began working with a student designer on a collapsible Easter toy.

“What we really like is that our students are learning old-school engineering skills and at the same time teaching 21st-century computer-assisted design skills,” says Frasca. “To have that intergenerational exchange is fantastic.”

The lab also is participating with local high schools on 3D printing demonstrations and programs, including the University’s Weston Science Scholars Program. The month-long summer program – now in its 17th year – recognizes high school students with significant potential in science, mathematics and related fields.

“We were one of the most popular options,” says Frasca.

Exposing students to this technology before they consider college or fields of study is crucial to building a community of entrepreneurs, says Frasca. ■

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