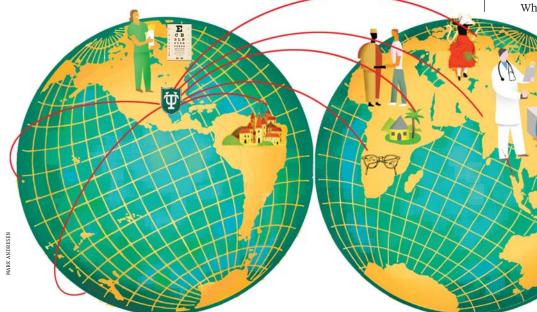
Possibilities

by Mike Fitts



From the first person to strike rocks together and generate fire, to humankind's increasing mastery of digital technology, the story of humanity is one of innovation—individuals using their knowledge to drive progress across the world. Our unyielding thirst to grow, improve and advance the way we live is utterly human; for all of our flaws, humanity's commitment to advancement and societal growth has never wavered.

At a time when society demands that institutions of higher education prove their worth, Tulane continues, again and again, to answer the call. Our commitment to interdisciplinary collaboration drives the universal tradition of innovation, moving the earth and its people forward.

What makes Tulane uniquely innovative is the way we choose to think differently about the world and draw connections that others ignore. At Tulane, we teach our students how to build something—a bridge or a vaccine or a business. We provide the skills to think nimbly across disciplines, and to tackle problems from multiple perspectives. We offer vast, original opportunities to innovate at every turn.

Dr. Ramesh Ayyala, born in Hyderabad, India, is a professor in the School of Medicine here at Tulane. He has obsessed his whole life with curing glaucoma—a disease that is easily preventable and yet is the world's second leading cause of blindness.

In this country, it is easy to get tested and diagnosed. But around the world, it's not so easy. Millions live in places where access to traditional glaucoma tests is impossible, because they require the big, expensive and heavy machines you see at the eye doctor's office. Countless go blind as a result.

NEW PERSPECTIVES

At Tulane, students and faculty engage in world-altering research.

He wanted to find a solution to these problems. There must be some way to make a test small and portable enough to bring to the underserved masses of the world! A kind of "Backpack Ophthalmology."

When Dr. Ayyala saw his first virtual reality headset, he had an incredible idea to use video game

technology to conduct glaucoma tests. But this

wasn't a problem that could be solved with solely his own medical understanding. He went to the Department of Computer Science, a department that wasn't just open to working across fields-it is set up to do so by design; our entire computer science department is made up of faculty who work on the application of technology to solving other

problems, which has led to some truly amazing results.

It was the perfect department for Dr. Ayyala to enlist a team of faculty and undergraduate students, whom he tasked with creating a virtual reality glaucoma test that can literally fit in your backpack. One of these students is Carolyn Ma, a senior majoring in finance and computer science. For the rest of her life, she'll get to brag about how her capstone project will help prevent blindness in millions of people.

Today the project is nearly complete. It will be cheap and entirely portable, and it will stop blindness in its tracks.

That's what Tulane does; we make innovation possible by thinking about problems from every perspective. We push our students to engage, hands-on, in world-altering research.

Walter Isaacson, a great friend of Tulane, once said, "Innovation will come from people who are able to link beauty to engineering, humanity to technology and poetry to processors." This is the beauty of Dr. Ayyala's ambitious project. This is the future of higher education and research, and it is undoubtedly the future of Tulane.

I wonder how Tulanians will continue to change the world in 2017?