

CALIFORNIA STATE UNIVERSITY, LONG BEACH INNOVATION CHALLENGE

Sponsorship Opportunities

<u>Program Overview:</u> Now entering its ninth year, the *Innovation Challenge* provides inspiration and support to CSULB students interested in entrepreneurship, helping them advance their ideas from concept to business plan. Through contributions and support from industry and corporate sponsors, hundreds of students have gained real-world experience in creating business plans, developing products and prototypes, and launching new businesses, contributing to their skills and knowledge base as well as the regional economy.

A joint venture between CSULB's colleges of Engineering, Business Administration, and the Arts, as well as local industry and volunteers and the CSULB Institute for Innovation & Entrepreneurship, the *Innovation Challenge* is open to university students from all majors. Student teams are assigned a mentor from the business world to guide them in developing their idea and business plan. The program has strong support from the corporate community, the investor community, the university, and the city.

<u>The Competition:</u> Each team prepares and submits a business plan to the *Innovation Challenge* competition, and four finalists are selected to present their proposals to a panel of judges. One team is selected as the winner and receives funding and services to launch their business. A second prize may be awarded if funding is available.

<u>Educational Experience</u>: The *Innovation Challenge* provides students from a variety of disciplines with a competitive environment in which to identify and develop their business idea – to inspire them to pursue their idea, create a business plan, promote that plan, and put it into motion.

Engaging in the CSULB *Innovation Challenge* prepares students for their professional and academic futures by providing an opportunity to practice and expand their skills in teamwork, leadership, project development, business plan creation, public speaking, and network creation.

<u>Support:</u> The *Innovation Challenge* is funded by donations from industry and private individuals. Donations are used to fund the winning team and support activities related to the contest. Donations are tax deductible and are targeted to help students transform their innovative ideas into profitable business ventures. Help support these inventive problem solvers by becoming a sponsor of this exciting new entrepreneurial program. For more information visit www.csulb.edu/innovation-challenge.



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Sponsorship Information: APRIL 2019

Name:			
Company:			
Address:			
City:	State: Zip:		
Home ph	ne:Business phone:		
E-mail:			
I/we wish to support CSULB "Innovation Challenge" (please check one):			
	\$3,000 Gold		
Enclosed is my check in the amount of \$ (Please make checks payable to 49er Foundation: Innovation Challenge)			
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 1	ım unable to attend, however my donation of \$is enclose	d.	
□ і	olan to attend the final event along with additional guests.		
Please fax this form to (562) 985-7061 or mail:			
	California State University, Long Beach Attn: College of Engineering Development Office 1250 Bellflower Boulevard, MS-8306 Long Beach, California 90840-8306		

Phone: (562) 985-55840 **Tax ID #: 45-2163910**



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2018 Winner, First Place: Artemus Labs

The winning Artemus Labs team collected feedback from amputees and evaluated existing prosthetic liners before designing their Python liner, which is breathable and comes in bright colors and two designs. One of the Innovation Challenge judges said the liner looks like a high-performance sports shoe.

The Artemus Labs team was co-led by Rae Jillian Rivera, an electrical engineering technology major, and Calvin Leung, a CSULB marketing and management information systems major who was on finalist teams in 2017 and 2016. Other team members are CSULB students Anna Maria del Mundo, management information systems; Nikki Escobar, industrial design; and Kimberly Ventura, aerospace engineering. Their goal was to make amputees "feel sexy." "Liners today have a style that is bland," said Rivera. "Current liners claim they are breathable, but they just don't work."



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2017 Winner, First Place: STAR

Stellar Aeronautic Robotics' license-plate recognition drone to catch parking scofflaws was named the top team in the CSULB 2017 Innovation Challenge. Donald Truong, team leader of STAR, told judges a drone would be better for the environment, and let parking enforcement be done autonomously and without traffic interference or paper tickets. The drone's camera would send images back to the base, where campus police would then issue tickets via email. The drone has drawn interest from several campuses, including CSULB. The team also included Paul Delgado, Trisha Echual, Inna Echual, Elizabeth Kim, Grace Ji, and Caitlin Rubia. STAR beat out three other teams for the Innovation Challenge top prize.

STAR team leader Donald Truong said he initially came up with the idea last summer and the group began working on the details last semester. Truong told the judges that a drone will be better for the environment, parking enforcement can be done autonomously and without traffic interference. He pointed out that traffic on the Cal State Long Beach campus can be heavy at times, possibly preventing officers from patrolling the parking lots.

The drone's camera would send images back to the base, where campus police would then issue tickets via email. Patrol officers would not have to get into a car. The drone has drawn interest from Cal State Fullerton, Cal State Dominguez Hills, Fullerton College, and CSULB.





2016 Winner, First Place: The Boxing Movement

The CSULB *Innovation Challenge's* top team for 2016 took repeated punches and jabs from senior citizens to test out its winning business idea. The Boxing Movement team, made up of business majors Eric Lara and Anthony Gonzalez, and mechanical engineering major Gina Gionta, won the top prize of \$10,000 in seed funding and \$40,000 in services for a mobile boxing gym that could be trucked to recreation centers and other facilities to help seniors have fun and maintain strength.

"It's something that can benefit the entire senior population," said Gonzalez (right), a personal trainer at CSULB's Student Recreation and Wellness Center. He added that spending on wellness-based services is expected to increase from its current level of \$200 million to \$1 trillion by 2025. Team members got the idea after seeing elderly relatives break bones in falls and face a difficult recovery. To test it out, they boxed with seniors at CSULB's LifeFit Center. The Boxing Movement already has several interested customers. The winnings, said Gonzalez, will go toward buying a truck and building the trailer. The team is developing the company website and social media channels and hopes to construct the trailer by next fall and launch the business in spring 2017.

The *Innovation Challenge*, he said, "has allowed us to gain a 'fast pass' to starting up our business. We now have a boost in funding and resources to get this business up and running as soon as possible. It further reassures us that this is a business that people want to see started up to better the lives of our senior population."





2016 Winner, Second Place: IMPETUUM

Team members Matt Scholten, Andrew Siwabessy, George Syage, Lan Chi Truong, and Geoffrey Parker will receive \$5,000 in cash to help them launch their virtual-reality controller The Yoke, which promises to deliver a fully immersive experience. Team leader Scholten, a 2009 mechanical engineering graduate, said he's been dreaming about the idea for several years. "The bloggers are calling 2016 the year of virtual reality," he said, noting that the industry is forecast to be generating \$30 billion annually by 2020.

A former art major, Scholten has worked on artificial intelligence projects for NASA's Jet Propulsion Lab and founded and bootstrapped a previous startup. The other team members also possess broad technical experience. What sets The Yoke aside from its competitors is that it's fully immersive instead of 2D. "When you hang onto a rock wall, you can feel the rock wall," Scholten said.





2015 Winner: LuxNova

LuxNova, a startup working to produce 3D-printed bones, gained considerable attention from its 2015 *Innovation Challenge* win, generating media coverage in seven countries and five languages. Since then, the startup has registered as a limited liability company, moved into an office at CSULB, and started the search for a permanent retail warehouse. Led by Trevor Wagnor, the team includes William Berube, Paul Ferretti, German Leal, The-Bao Nguyen, Adam Price, Miguel Vintimilla, Michel William, and Dickson Yuen.

LuxNova presented its work at the 2015 SME Rapid 3D Printing Convention in Long Beach and partnered with a group that has pioneered a method for 3D-printing cartilage. The team is working with that group on an article on 3D printing and entrepreneurship. LuxNova has completed early research and development and is now moving on to marketing the technology and developing a foundation for further research. Company officials expect to produce a commercial bone printer capable of industrial-scale operations by 2020.





2014 Winner: InFluidS

The InFluidS team, comprising Shahab Taherian and Jeremy Bonifacio, has been working on a noninvasive tool that uses simulations to help physicians more quickly diagnose pulmonary diseases, including pulmonary embolisms, which affect more than 1 million people per year. In FluidS is also developing new and better designs for inhalers, surgical masks, and drug-delivery systems, and improving preventative measures for controlling air quality.

Taherian and Bonifacio met in the CSULB Engineering and Industrial Applied Mathematics PhD program. Both are lecturers in the CSULB Mechanical Engineering and Aerospace department. Taherian conducts research on air pollution's effects on the human respiratory system. Bonifacio was recognized as MEDTRANS Transportation Center's Student of the Year and received a certificate of commendation on his research into the reduction of airborne pollution.





2013 Winner: TextbookHouse.com

CSULB senior Alexander Santamaria's 2013 *Innovation Challenge* win helped him launch a textbook-trading website and app that connected college students with other college students on their campus who were looking to trade their textbooks. Santamaria's intent was to save students money and time typically spent at university bookstores. Instead students, could reuse and recycle their books while reducing their struggle to find reasonably priced textbooks.

TextbookHouse.com used a database that showed what books students already owned and which books they would need for the following semester. Once a connection was made, they could meet with each other and establish a trade. At the end of the semester, the students could return their trade or they could use them for another trade for the following semester.





2012 Winner: GlydeTech

CSULB College of Business Administration students Mathew Martin and Ryan Beck won the 2012 *Innovation Challenge* for GlydeTech, a magnetic gliding technology intended to make sliding doors and windows of any size easier to open and close. The technology can be applied to patio doors, windows, room dividers, and closet, shower, and industrial doors. GlydeTech ensures security and quieter operation and enables a 26-pound sliding door to close with just 2.1 ounces of weight. For more information, visit http://www.glydetech.com/.

The seed funding went toward obtaining a patent, participating in industry trade shows, and building prototypes for potential customers. Martin and Beck are working on a licensing agreement. The *Innovation Challenge* was a huge help in building their business. "It's had a tremendous impact on my life," said Martin. "I met great people through *Innovation Challenge* and developed connections that I never would have without it. I've learned so much from my experience and wouldn't change it for anything."





2011 Winner: Phasor Cycles

With its 2011 *Innovation Challenge* win, Phasor Cycles was jumpstarted from a senior design project to a growing business poised to become part of the electric transportation revolution. The team consisted of mechanical engineering students David Pearce, Dan Southard, and Rogelio Rosas. The trio created the Electric Motocross Electric Bicycle (EMXB). Lightweight, powerful, and emission-free, the EMXB combined the capabilities of a motorcycle and a mountain bike.

Phasor went on to sell frame kits that let customers build bikes to their specifications and built custom electric beach cruisers or mountain bikes upon request. The *Innovation Challenge* seed money was used to execute the business plan, build a production model bike, invest in the tooling to start manufacturing, and pay IP attorneys for a patent search. Phasor Cycles was the first to offer a DIY option for the electric bike industry. Phasor Cycles sold one complete bike, and over 40 frame kits at a price of \$1,860 each, shipped to 13 different countries all over the world. The company used web forums, YouTube videos, Facebook, and word of mouth to promote its products.

"Winning the *Innovation Challenge* made a dream come true that I didn't even know I had," said Pearce. "The *Innovation Challenge* set the course of my life. It made the goal of owning a business tangible and attainable, at a time in life that is ideal for taking these risks, but also a time where we are usually lacking financially to act on an idea."

Pearce has since gone on to start a rapid-prototyping company called DP Design Fab.