**Innovation at Work**

**Inventions, Licenses, Patents, Spin-Offs, Start-Ups and Other Successes**

**From the Office of Innovation and Commercialization**

**At UC San Diego**

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**A “Most Innovative New Product”**

The company [ComHear](http://www.comhear.com/), which licenses UC San Diego technology, won a “Most Innovative Product” Award at Connect’s recent annual ceremony. The company develops speakers and wearable audio products that use beam-forming technology and software to produce an immersive, 360-degree sound for listeners. The software-and-digital-media company’s “MyBeam” conferencing product earned the prestigious kudos. Connect has been recognizing outstanding new products in technology and life science since 1988.

**Around Campus: Undergrads Rev Up Start-Ups**

Congratulations to **Oculux,** a talented group of students who continue to make strides in their fight for sight. Oculux recently took second place in the Bio/Med finals at Entrepreneur Challenge for their pitch of their solution to improve both glaucoma patient care and treatment.

**A Truly Dynamic Duo**: Deepak Atyam, a Mechanical and Aerospace Engineering student, and Alex Finch, a Structural Engineering student are the founders of a startup on a mission to use 3D printing to create designs for high performing, lightweight, cost efficient rocket engines: **Tri D Dynamics.** The team's accomplishments have made UC San Diego the first university in the world to successfully design, print, and test a metal 3D printed rocket engine.

**Zahn Prize Competition Rewards Student Teams**

This year, the Moxie Center for Student Entrepreneurship was able to double the total amount of cash prizes for student teams at its annual Zahn Prize Competition. The competition was held at The Basement, our newest entrepreneurial space, and the Moxie Center awarded a total of $20,000 in cash prizes to young campus innovators:

* Ganesh Elie of **Slithr**, electronic longboards

<https://www.linkedin.com/in/ganesh-elie-29945279>

* Josh Cohen of **Tranio**
* Eric Suen of **Aqua Design Innovations**, Inc. <https://www.kickstarter.com/projects/kevinzl/ecoqube-c-your-window-to-nature>
* Joy Sampoonachot and John Chou of **Cocoon Cam**

<http://www.cocooncam.com/technology>

* Deepak Atyam and Alex Finch of **Tri-D Dynamics.**

<http://www.space.com/23107-3d-printed-rocket-engine-student-video.html>

**Grad Student’s ‘GrollTex’ Mass-Produces Graphene**

The Jacobs School of Engineering recently featured Aliaksandr Zaretski, an accomplished, model student of the Entrepreneurism and Leadership Programs. While working towards his Ph.D. in Nanoengineering, Alex has found a way to mass-produce graphene, an allotrope of carbon that is one atom thick. And his startup company, **GrollTex**, seeks to commercialize a new method of fabricating large-area single-atom monolayer sheets of transparent graphene.

Alex has successfully patented the technology through UC San Diego's Office of Innovation and Commercialization and hired a CEO. In the article, Alex reflects on the unique entrepreneurism culture at UC San Diego and his experiences at Entrepreneur Challenge and the von Liebig Entrepreneurism Center, leading up to his recent first prize win at Chapman University's 4th Annual California Dreamin' Business Plan Competition. Read his story [here.](http://jacobsschool.ucsd.edu/news/news_releases/release.sfe?id=1756)

**Oceanographers Earn Funding for MANTA**

Congratulations to MANTA Instruments Inc. for recently securing seed-funding investment from the Triton Technology Fund for their breakthrough technology to effectively characterize nanoparticles.

With decades of fieldwork and experience studying nanoparticles in seawater, MANTA founders Dariusz Stramski, Kuba Tatakiewicz and Rick Reynolds of the Ocean Optics Research Lab at the Scripps Institute of Oceanography experienced firsthand the difficulty of getting good characterization data from nanoparticle samples. Even with the best technologies and scientific instruments on the market, methods were tedious and inaccurate results were often not usable for their scientific papers. Their experience inspired them to solve this core problem for measuring nanoparticle size and concentration. They developed their initial idea in 2010 and conducted research and development for 36 months at SIO. In 2014, the MANTA team connected with Rosibel Ochoa, Executive Director of the von Liebig Entrepreneurism Center, and received mentorship from von Liebig mentor Rick Cooper. Cooper helped the team develop a business plan and financing strategy, and launch MANTA in September 2014. Read about that innovative success [here.](http://jacobsschoolofengineering.blogspot.com/2015/06/uc-san-diego-researchers-launch-startup.html)

**Qualcomm Institute’s ‘Innovation Space’ Filling Up Fast**

* **Foundation for Learning Equality** co-founder Jamie Alexandre said the non-profit foundation has been working with the Kahn Academy and other edutech companies to develop open-source curriculum for the hundreds of millions of children around the world who are unable to attend school.
* **RAM Photonics** president John Marciante said the six-year-old startup is focused on identifying and licensing highly innovative and transformative photonic technologies for use in medical, high-power machining, and communications industries.
* **Sinopia Biosciences** co-founder Aarash Bordbar has been working with UC San Diego professor of Bioengineering Bernhard Palsson to develop analytics technologies for identifying signature characteristics in genomic data that correlate with adverse drug reactions.
* **STEAM Engine** co-founder and Qualcomm Institute research scientist Albert Yu-Min Lin said the company is creating an education-technology platform committed to immersive learning, citizen science, and the aggregation of knowledge through game-based simulation.
* **Technosylva** CEO Joaquin Ramirez, a fire prediction expert, has developed technology for geospatial data analysis that can be used by public safety agencies in fighting wildfires.
* **VirBELA** CEO Alex Howland said the startup has developed software that uses simulation and virtual world gaming for executive recruiting and related human resources assessments of job competencies.

**Rady-Affiliated ‘Cyber Genomics’ Finds a Bio-Tech Buyer**

UC San Diego Rady School of Management alumna Ashley Van Zeeland, Ph.D. is the co-founder and CEO of **Cypher Genomics,** a company with the technology to revolutionize human health through their improved interpretation of human genomes.

And now the genome-information company has been purchased by **Human Longevity Inc.,** another San Diego-based biotech company.

Human Longevity, led by genomics pioneer J. Craig Venter, said Monday that Cypher Genomics' genomic interpretation skills will add important insight to HLI's mission of improving health.

Prior to the sale, Ashley explained that the company was inspired by a prototype software designed by Ali Torkamani being used for research at the Scripps Translational Science Institute. “I was working with colleagues Nicholas Schork, Eric Topol and Ali Torkamani when we realized we had a really promising technology,” said Ashley. She described the timing of it all to be very fortuitous and spoke highly of the community and mentorship she was provided at mystartupxx, the Rady School’s accelerator supporting female founders and female-led companies. Ashley had just enrolled for the MBA program at the Rady in 2010, a few months before the mystartupxx program first opened. When Ashley was accepted into the accelerator, Cypher Genomics was less than a year old and still in the very early stage of development.

**San Diego Venture Group’s ‘Pitchfest’ Features Five from Campus**

Founded in 1986, the San Diego Venture Group is a non-profit organization designed to bring together people in San Diego who are interested in new enterprise and the process of creating it.

The group provides a networking forum for entrepreneurs, venture capitalists and advisors in an informal atmosphere where human expertise can foster new ventures.

One of those forums is “Pitchfest” Business-Plan Competition, held Dec. 16 in the Hyatt Regency – and five of the contestants have an affiliation with UC San Diego:

* Abreos
* CureMetrix
* Grolltex
* Nasseo
* Tortuga Logic.

Get information about the event and the competitors [here.](http://www.sdvg.org/events/)

**Licensing Officer Skip Cynar Has a Real ‘Catch’**

A couple of years ago, Skip Cynar, a licensing officer in the Office of Innovation and Commercialization at UC San Diego, created a CATCH (Coordinated Approach to Child Health) video. In 2014, he went on to license CATCH trademark and copyrighted materials to a new public charity, appropriately named the CATCH Global Foundation. This new 501(c)3 has already secured grants to expand the reach of CATCH throughout the US. The foundation has now translated much of the CATCH curriculum into Spanish and has initiated pilot programs in Mexico and South America as well.

Check out the charity’s new website [here.](http://catchinfo.org/)

The CEO of the CATCH Foundation, Duncan van Dusen, is very busy expanding the reach of this technology, jointly developed at UC San Diego.