SEP/OCT 2017

COVE CURRENTS

BOARD LETTER
Assad Kazeminy

PAST TIDES 2
- ANTrepreneur Awards
- WordCamp 2017
- Wayfinder Pitch and Match
- Applied Innovation Interns & ITG Fellows End of Year Celebration
- Tech Trek 2017
- Tech in Motion - AI / Machine Learning
- Base 11 Innovation Grand Opening
- **TECH EVENT** BIO 2017 Conference

IN THE ECOSYSTEM 12
Cybernaut Venture Capital

EIR SPOTLIGHT 13
Jorg Lorscheider

ACROSS UCI 16

RESOURCE SPOTLIGHT 18
ACCESS UCI

COMPANY SPOTLIGHT 23
Lyceum Pharmaceuticals

MAKING WAVES 24
- Wayfinder Startup FunBand - Nominated by OCBJ for 2017 Innovator of the Year Award
- Velox Biosystems - Successfully Closes Recent Funding Round
- Modulated Imaging - Raises Series A Round
- Wayfinder Incubator Highlights

STARTUP SPOTLIGHT 9

Flyspan Systems

Connecting The Power Of Drones To Commercial Industries

TECH CURRENTS SPOTLIGHT 19

Markus Ribbe and Yilin Hu

Brewing Biofuel From Bacteria

COVE @ UCI

A UCI Applied Innovation Publication

UCI Cove
@UCICove
@UCICove
UCI Applied Innovation
UCI Applied Innovation

Orange County/Inland Empire
SBIR Road Tour
@ UCI Applied Innovation

Special Thanks to Our SBIR Road Tour Sponsors:

ANTIGEN DISCOVERY INC the proteome company

greater irvine chamber | Destination Irvine Economic Development

HOTB SOFTWARE SOLUTIONS

RIVERSIDE LAW SPECIALIZING IN INTELLECTUAL PROPERTY

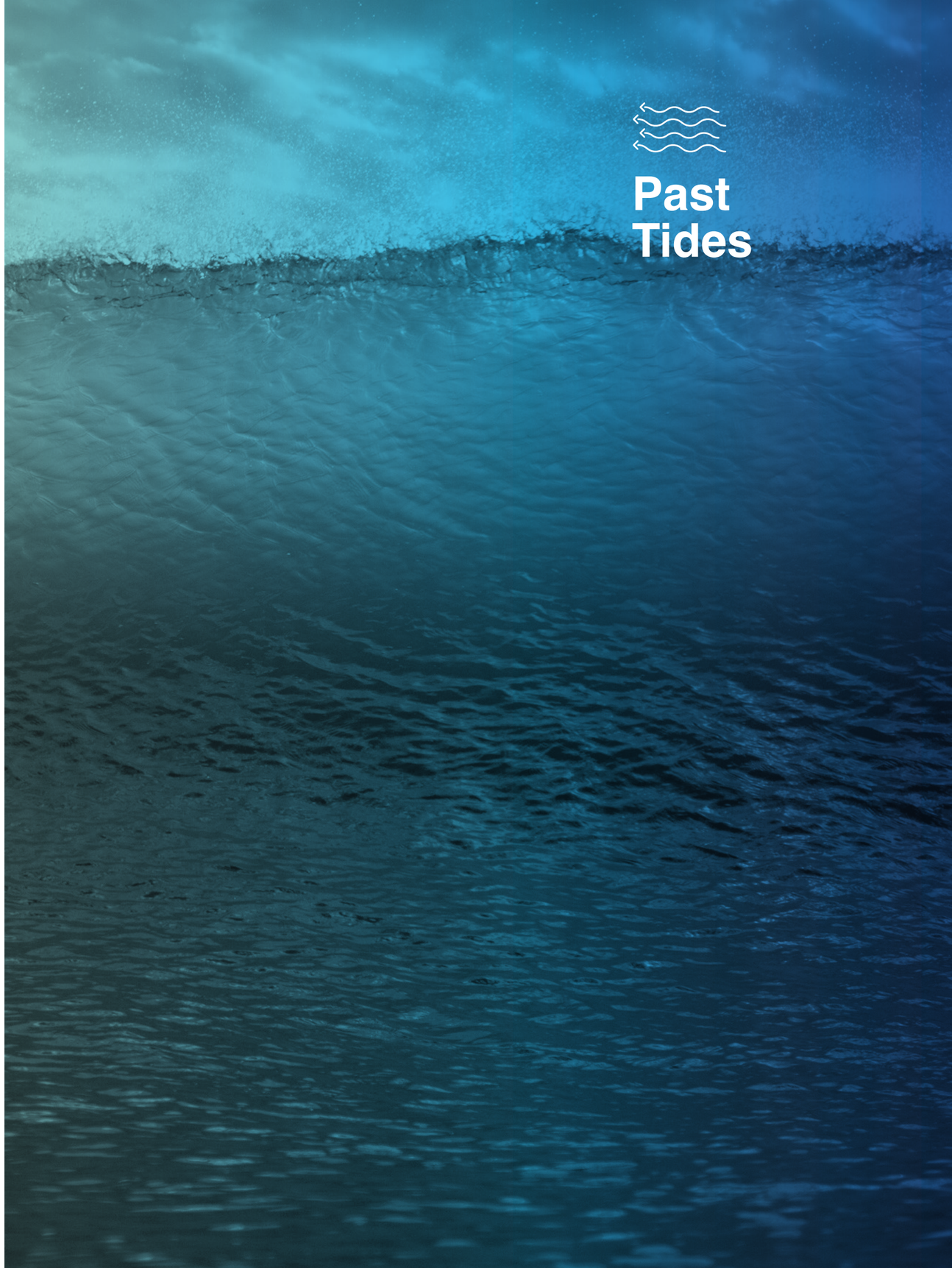
Board Letter

As a longtime resident of Orange County who has built a company in the region, I also have been a supporter of UCI for many years as a member of their CEO Roundtable and as a member of the UCI School of Physical Sciences' Leadership Council to drive innovation forward. From my vantage point, where a flourishing collaborative ecosystem exists, such as the one cultivated by the efforts of UCI Applied Innovation in conjunction with numerous partners throughout Orange County, tremendous economic opportunity grows in tandem with it.

When industry and the university come together to advance best-in-class discoveries generated in the laboratory to move it through the necessary regulatory channels to market, progress is made for the betterment of all. It is in the spirit of collaboration and advancement of life-changing technologies that I have chosen to be an Applied Innovation Board Member.

From my experience conducting research at UCI and as a supporter for a diverse spectrum of university initiatives for many years, the Proof of Product (POP) Grants offered through Applied Innovation is one among several resources that provide an opportunity for my fellow industry leaders to engage directly with the organization. This initiative helps bridge the innovation gaps for UCI projects in their early stages and is a collaborative effort between the university and volunteer reviewers who provide recommendations based on their domain expertise. Agreeing to be a reviewer myself in the pharmaceuticals category, I invite my fellow industry leaders to join me on this initiative or to engage with Applied Innovation through their numerous other opportunities. Collectively, we can make a transformative impact in Orange County.

Assad Kazeminy, Ph.D, President & CEO (retired),
Irvine Pharmaceutical Services, Inc.
UCI Applied Innovation Board Member



Past Tides

ANTrepreneur Awards

June 2

On June 2, the UCI ANTrepreneur Center held its third annual ANTrepreneur of the Year Awards at UCI's Paul Merage School of Business. The event recognized student entrepreneurs, UCI startups, and organizations from across campus for their contributions and accomplishments during the 2016-17 school year.

A part of Applied Innovation and founded in 2014, the ANTrepreneur Center is often the first stop for students interested in entrepreneurship. It is the campus hub that helps the UCI community of students, staff, faculty, and alumni explore entrepreneurship, refine potential business ideas, and navigate obstacles for existing ventures.

Startups that took home awards for the night included Wayfinder incubator teams and Cove incubator companies that recently graduated from the program. Highlights from the event included:

Gen Girl Media: A Cove incubator graduate and now Cove tenant that received the "Best Growth Strategy" award. The first product line from Gen Girl Media, Middle School Moguls, is a character-driven doll, book, and online edutainment line for girls, ages 6-11. The product is currently on shelves at major retailers such as Target.

Lythous (formerly Bulletin): A Wayfinder startup team with an app dedicated to simplifying academic life for students, Lythous received the "Best Pivot" award.

From far left to right: Assistant Director, Breanna Bremer and Executive Director, David Ochi of the ANTrepreneur Center showing Anteater pride at the award ceremony.

After exploring different market segments and use cases, the team decided to pivot their offering and focus in a new direction.

Failsafe: A Wayfinder startup team with a solution that optimizes the chances of someone getting help in threatening situations, Failsafe received an award for "Best Female Owned Business." It also recently took second place in the Consumer Products category of the New Venture Competition, organized by the Beall Center for Innovation and Entrepreneurship at the Paul Merage School of Business and Applied Innovation.

HyperSight: A Wayfinder startup team with a SaaS solution allowing new car buyers to personalize and interact with their dream cars using an augmented reality headset, HyperSight received the "Best Intellectual Property" award.

Esqalate: A Wayfinder startup with a platform connecting low-income Americans with legal representation received the "Most Potential for Social Impact" award. Additionally, Esqalate took first place in the Blum Center's Designing Solutions for Poverty Competition and was recently featured in the Orange County Register.

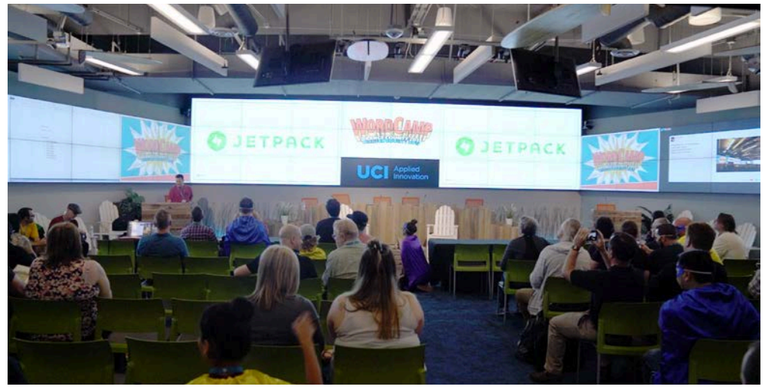
Brian Leung, BottleRocket: UCI alumnus and co-founder of Wayfinder startup BottleRocket, a mobile app empowering users to earn money by easily scheduling recycling pick-ups at their home, received the "Best Alumni ANTrepreneur" award. BottleRocket also raised $200,000 in funding earlier this year from Mucker Lab in Santa Monica.

Overall, the recognized teams, individuals, and organizations revealed the best of what UCI innovation has to offer to the community, both locally and globally.

To learn more about additional recipients recognized at the awards ceremony, visit the ANTrepreneur Center blog.

WordCamp 2017

June 10, 11



Wordpress developers, designers, and enthusiasts gathered at the Cove for the opening session of WordCamp 2017.

On the weekend of June 10 and 11, the Cove was bustling with web developers. WordCamp Orange County 2017 had a superhero theme for its workshops on coding, security, content creation, and community building.

Cynthia Kirkeby, CEO of Wayfinder startup Adaptifyed, a middleware advertising platform for monetizing downloads, has attended multiple WordPress camps. Adaptifyed built its website on WordPress. Kirkeby particularly liked the WordPress support toolkit workshop by Jerrett Gucci. "It was a phenomenal discussion about tools that are useful for supporting a community and memberships," Kirkeby says. Kirkeby also attended Adam Warner's session, "You created a plugin, now what?"

Adaptifyed has just created a plugin to help publishers monetize downloads, which should be available in the wordpress.org codex in about a month. "The discussion was on next step marketing and how to market your plugin to the 72 million WordPress users around the world," Kirkeby says. "There are over 42 million English speaking WordPress sites. A huge market, to say the least. So understanding WordPress and the users is really critical for business today."

Anthony Ko, one of Kirkeby's technical co-founders, attended Jacob Arriola's session, "Vue.js: The javascript framework for designers who know just enough javascript and jquery to get by." According to Kirkeby, there was something for everybody, including complete beginners. For Adaptifyed, access to a community of experts, and the ability to distribute its software through a WordPress plugin is invaluable. "Basically, with one click people can put it into their website," Kirkeby says.

In "Cybersecurity, Russian Hackers, Privacy & You," presenter Yvonne Conway-Williams noted that cloud platform company Akamai's Q1 2017 State of the Internet / Security Report, listed the top five source countries for web application attacks in q1 as the U.S., the Netherlands, Brazil, China, and Germany. (Russia ranked eighth). She advised attendees to avoid sharing geotagged photos, to use a password manager, and not to put personal information like birthdates, mother's maiden name, or addresses online. "With your name, social security number, and birthdate, you have a trifecta for identity theft," Conway-Williams says.

"In Images that Pop! Create photos that amaze your audience," Amber Hewitt suggested using a tripod and self-timer with remote cable release for a DLSR camera. Don't forget the rule of thirds in a photo; "Give someone room to move within a photo, to make a more dynamic image," Hewitt says. She explained how to diffuse light with flashes and how to use reflectors for even light. On a sunny day, a field flash can fill in shadows. Use a simple background, shoot in shade or indoors with indirect sunlight, and bring people together.

Hewitt instructed participants on how to make a homemade product tent, lit by desk lamps on either side, by constructing a mini-cyclorama employing foam core, invisible thread, and gently bending a poster board backdrop into a curve that eliminates horizon lines. "Hide distracting stuff, and ensure everything is clean," she cautions. If you are taking a product shot of jewelry, using a LED flashlight on a timer can make crystals sparkle.

Hewitt recommended the following apps:
Mobile camera apps:
Proshot, VSCO, Hydra, Obscura Camera, Camera+

Retouching apps:
Skrwt, Afterfocus, and Moldiv

She also suggested editing photos in this order:
1. Crop, 2. Exposure, 3. Temperature/Cast, 4. Sharpen, 5. Clarity, 6. Saturation

Hewitt's presentation, including optimal pixel sizes for different social media is available at: http://ambr.in/Zi8TcA.

In "Understanding and Supporting Web Accessibility," Rachel Cherry, senior software engineer for Disney Interactive, shared pointers for designing websites accessible to people with disabilities, including:

- Graphics should have a text equivalent
- Videos and audio recordings need captions
- Colors should not be used as a sole method to convey information contrast
- Never use "click here" on links – the

purpose of all actions should be determined from text
- All site functionality should be accessible using a keyboard

Cherry suggested some accessibility tools:
- WAVE web accessibility evaluation tool [http://Wave.webaim.org].
- Chrome accessibility extensions
- tota11y, an accessibility (a11y) visualization toolkit, http://khan.github.io/tota11y/
- HTML_CodeSniffer, a client-side script that checks HTML source code and detects violations of a defined coding standard http://squizlabs.github.io/HTML_CodeSniffer/
- pa11y, the automated accessibility testing, https://github.com/pa11y/pa11y
- Deque digital accessibility programs, https://www.deque.com/products
- A design color tool: https://material.io/color
- ChromeVox, a free screen reader for visually-impaired users
- For seeing websites like the color blind, https://www.w3.org/wai/er/tools
- www.webaim.org/resources/contrastchecker
- The Accessibility Project lists resources for front end developers: www.a11yproject.com/resources
- https://developer.wordpress.org/themes/functionality/accessibility

Visit: https://bamadesigner.com, #bamadesigner for information on Cherry, or look at her slideshare under Rachel Carden.

Wayfinder Pitch and Match

June 28

On June 28, teams recently admitted into the Wayfinder incubator program presented their startups to a crowded room of EiRs at the Pitch and Match event held at the Cove. An opportunity for EiRs and Wayfinder startups to interact and get to know each other, the event provided numerous opportunities for teams to engage with EiRs who represent a diverse range of expertise that includes marketing, business development, biotech, medical devices, finance, legal, and more. Teams who pitched were asked to include a segment at the end of their presentation indicating what they needed the most help with to move their startup forward.

Wayfinder teams set up around the Cove and networked with Experts-in-Residence, developing new opportunities for entrepreneurial advancement.

The new Wayfinder cohort includes winners from this year's New Venture Competition, a collaborative effort between the Beall Center for Innovation and Entrepreneurship at the Paul Merage School of Business and UCI Applied Innovation, and Tech Surge, a parallel track of the New Venture Competition led by Applied Innovation. Wayfinder teams also include UCI alumni, undergrads, faculty, or startups utilizing UCI-generated intellectual property.

The evening began with an introduction by New Venture Director Juan Felipe Vallejo, who served as the emcee for the evening. After providing an overview of the Wayfinder program's structure and intake process, Vallejo transitioned to the fast pitch portion of the event. Startups who pitched include Purist, a company developing a method to locally produce medical isotopes to treat cancer; NanoShield Biotix, a startup developing a germ-killing texture inspired by nature with surface applications in industries ranging from ophthalmology to consumer products; and many others who represent a variety of both product and service offerings. After the pitches had concluded, the teams went back to tables that were set up throughout the Cove for a networking session with EiRs. Conversations continued into the evening as new opportunities for mentorship and collaboration between attendees developed.

Applied Innovation Intern & ITG Fellows End of the Year Celebration

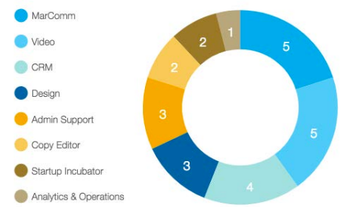
July 7

On July 7, UCI Applied Innovation staff held a special event honoring the efforts of interns and fellows, both past and present, who have contributed their time and effort to the organization. Starting with a little more than a handful of interns in the early days of Applied Innovation, the program has grown to more than 25 interns and fellows representing eight schools across UCI.

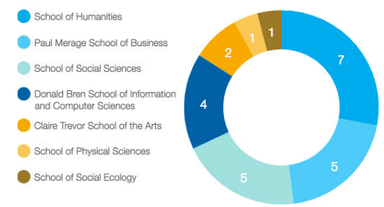
Supporting a wide range of mission critical functions, Applied Innovation intern responsibilities include support in the following areas: Marketing/Communications, Design, Copy Editing, Video, Admin Support, CRM, Analytics & Operations, and Startup Incubator.

The Invention Transfer Group (ITG) is a significant component of the Research Translation Group (RTG), and is tasked with helping university faculty, physicians, and researchers understand and navigate the commercialization of their discoveries. ITG offers part-time, paid fellowships to graduate students, post docs, or professional students at UCI a hands-on introduction to university technology transfer and intellectual property management.

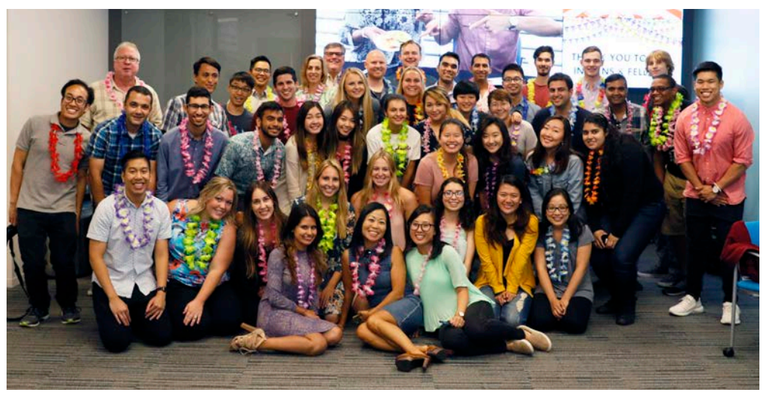
Intern Focus Areas



UCI Schools Represented



The Applied Innovation staff alongside interns and fellows.



Under the direction of a licensing officer, fellows assist the office in conducting technology assessments, prior art searches, writing invention summaries, and initiating market research of UCI inventions. This opportunity gives fellows experience analyzing inventions and an understanding of the patenting and commercialization processes while providing an excellent resource to the UCI inventor community.

In addition to technology assessments, ITG Fellows are afforded extra opportunities for professional development. Ahmed Khorshid, David Mallin, Kate Rodriguez, and Dr. Carol Pham recently attended and helped represent Applied Innovation at the BIO (Biotechnology Innovation Organization) 2017 International Convention in San Diego, CA. BIO is the world's largest and most prestigious biotechnology event, drawing industry and academic leaders from more than 76 countries to network and partner toward the development of next generation life science technologies.

Additional ITG Fellowship highlights include the recent graduations of Candice Gellner, awarded a Ph.D. in Pharmaceutical Sciences, and Sara Pennebaker, awarded a J.D. with a focus on intellectual property, in May 2017. New Fellows starting this summer include Jessica Hsieh from professor Wendy Liu's lab in Biomedical Engineering and Maysam Pessian from the UCI School of Law.

Encouraging professional development throughout their experience at Applied Innovation, students also explore additional opportunities during the summer; including internships at the following organizations: Microsoft, Paramount Pictures, Dialogue Direct, NebulaWorks, and Women for Women International through the UCDC program.

This year's celebration marks a significant milestone for Applied Innovation as the organization continues to grow and cultivate collaborative, forward-thinking students (both undergraduate and graduate level) - moving the needle of progress for innovation across the region forward.

Tech Trek 2017

July 13

On July 13, a diverse group of middle-school girls from the Tech Trek program spent a day at the Cove. Tech Trek is a week-long summer program held at eight campuses across California. The goal is to increase female involvement in math and science with an emphasis on fostering a sustained interest in these fields in their later years. At Tech Trek, girls are immersed in a world that empowers and encourages them to think about themselves as future scientists, engineers, mathematicians, and computer specialists. Started by the American Association of University Women (AAUW), the organization hosted their first program at Stanford in 1998.

The day at the Cove included problem-solving exercises that challenged participants to explore

innovative solutions and work collaboratively. Young entrepreneurs also provided their perspective by sharing their story around the early stages of building their companies. Applied Innovation also had a presence later in the afternoon with a workshop on focus groups led by Rehema Feleke, CEO and founder of Wayfinder startup FunBand. Afterward, the ANTrepreneur Center engaged the group with an interactive marketing flyer workshop. Startups participating from the Orange County ecosystem included a financial literacy workshop led by Paul Vasey of Cash Crunch games.

Tech in Motion Panelists (left to right): Andrew Bermudez, Erik Huberman, Tony Sarris, and John Fitch discussed Artificial Intelligence, Machine Learning, and Automation with moderator Neil Sahota (middle).

Tech in Motion - AI / Machine Learning

July 20

On July 20, Tech in Motion held a technology panel focused on Artifical Intelligence (AI), Machine Learning, and Automation at the Cove. Filled with a diverse cross-section of the Orange County ecosystem, the event was moderated by UCI Alumnus Neil Sahota, IBM Master Inventor and Worldwide Business Development Leader for the IBM Watson Group. Panelists included Erik Huberman, founder and CEO of Hawke Media; John Fitch, founder of Air Stream; Tony Sarris, founder and principal of N2Semantics; and Andrew Bermudez, co-founder and CEO of Digsy AI.

The focus of the evening's programming centered on defining AI, expanding beyond machine learning, algorithms, and big data. "The key to AI is pattern recognition," Bermudez said, "it is an inherent part of how we organize the world." According to Bermudez, AI, Machine Learning, and Automation can help sales teams outperform competitors by learning what is working well in a sales process and make decisions "faster than ever before." Huberman added that leveraging these technologies can help marketing organizations identify deficiencies and potentially automate processes.

The event concluded with a Q&A session from the audience including a popular question about how to determine the value that AI could bring to a company. Sarris discussed automation of tasks previously done by a person as an example. He suggested rather than modeling AI on the human brain, a company-centric solution could instead focus on the way a person thinks based on the task. Fitch added that AI presents an opportunity to leverage technology to do things that go beyond what humans can do — as it continuously improves itself.

A stream of the event can be viewed on the Applied Innovation Indi Channel at http://indi.com/956wx.

Base 11 Innovation Grand Opening

August 7

On August 7, Base 11 held a grand opening ceremony for the Base 11 Innovation Center at the Cove. Attendees traveled from across the country to be present and included leaders of industry, academia, and philanthropy. Base 11 connects STEM businesses, educational institutions and entrepreneurial opportunities with high-potential students who have shown interest and talent, but lack the resources and access needed to allow their interest to grow. They offer three tracks to achieve their mission:

- Academic-year internships and paid summer fellowships at world-class research institutions with mentorship, exposure to high-tech labs and experience with graduate-level research projects.
- A STEM Entrepreneur Program that includes a 16-week curriculum training to use the Fab Lab housed in Base 11 Innovation Centers, and culminating in a national pitch competition for cash prizes. Students gain leadership skills, business acumen and innovation techniques that they can apply to their startup or a major corporation.
- Workforce development programs that provide job-specific training and apprenticeships for STEM careers. The program also includes leadership development, life skills training and mentorships to support the students' overall success.

Success is defined as STEM-related employment, admission to a four-year college in a STEM-related field, or the development of a STEM-related business.

"The Base 11 Innovation Center is the focal point of the ecosystem we're establishing in Orange County to prepare more high potential, low resource students to fill in-demand jobs and launch new business ventures in fields like technology, aerospace and life sciences," said Landon Taylor, CEO of Base 11.

According to Base 11, their innovation centers feature an MIT-inspired Fab Lab and enables hands-on, project-based learning designed to empower students with STEM 2.0 skills that are in high demand by industry. This facility was built in partnership with Base 11's ongoing work with Applied Innovation to foster a growing ecosystem of high-potential, tech innovations and new business ventures in Orange County.

"The career-focused experience and innovation mindset that students will gain in a Base 11 Innovation Center is in high demand in the industry," said Al Bunshaft, senior vice president of global affairs for Dassault Systèmes. "Dassault Systèmes is excited to be one of the first companies to be part of this STEM ecosystem model in Orange County."

As part of the ceremony, community-college students who participated in Base 11's Autonomous Systems Engineering Academy presented final capstone projects completed at UCI. The students presented their talent in STEM related topics and answered questions from the crowd. The goal behind Base 11's partnership with Applied Innovation is to encourage more access and opportunities for students to gain knowledge in entrepreneurship, funding, incubation, and startup acceleration.

"We're proud to expand UCI's partnership with Base 11, continuing to enhance experiential learning and create more economic opportunities for entrepreneurs from underrepresented communities. UCI is increasingly being recognized for our track record of inclusion, and academic and research excellence among our first-generation, low-income and minority students. The Base 11 partnership will allow us to take it up a notch and encourage more entrepreneurs to find success in STEM industries," said Richard Sudek, chief innovation officer and executive director of UCI Applied Innovation.

Followed by these presentations, the crowd was then given an extensive tour of the innovation center and provided opportunities to engage with students and demos of their projects.

Watch the Grand Opening Ceremony on Applied Innovation's Indi Channel at http://indi.com/956z4v.

Attendees listened to presentations by Tonie Leatherberry, president of Deloitte Foundation, and Al Bunshaft, senior vice president of global affairs for Dassault Systèmes, and participating students teams before touring the innovation center.

Tech Event

UCI Applied Innovation Develops Business Opportunities by Engaging Industry at BIO 2017 Conference

The Biotechnology Industry Organization's Annual Conference (BIO) was held in San Diego this year with over 16,000 attendees including more than 3,100 industry-leading companies and 1,800 exhibitors ranging from Digital Health and Diagnostics to Bioprocess. The world's largest and premier life science-focused partnering event, Applied Innovation had a significant presence as senior staff had a full schedule of one-on-one meetings with over 100 key industry players, top-tier partners, investors, and support organizations.

As the sixth largest global economy, California has long been a leader in biotechnology, with some of the earliest companies in the sector such as Amgen and Genentech emerging from the state. Although San Francisco and San Diego have long been considered to be the primary centers in the space, Orange County is increasingly recognized as a place for medical device innovation, as well as a growing presence in the drug and diagnostics segments. "Because of the geographic dispersion in Orange County, however, navigating the ecosystem can be challenging, especially for groups from outside the region,"

From left to right: Lisa Stutts (IP Marketing Analyst & Fellowship Program Manager), Casie Kelly (Assistant Director of Licensing), Carol Pham (Fall 2016 ITG Fellow), and Michael Artinger (Managing Director, Research Translation Group).

said Michael Artinger, Managing Director of the Research Translation Group at UCI Applied Innovation. “Our focus is to make it as easy as possible for prospective partners and investors to access the wealth of cutting edge technologies being developed here, and our large presence at this year’s BIO event is just one of many examples of this effort.”

Ranked ninth out of public universities in the nation by U.S. News & World Report, UCI has an annual impact on the Southern California economy of $5 billion. Cumulatively, Applied Innovation has signed over 140 licensing agreements, produced over 1,000 active inventions and generated more than 100 startups based on UCI intellectual property. At BIO, there was no shortage of key industry players who wanted to learn more and engage with the breakthrough life science technologies coming out of UCI. “I had very substantive partnering meetings with a variety of pharma companies, such as AbbVie, Pfizer, Johnson & Johnson, Amgen, and Eli Lilly,” said Casie Kelly, assistant director of licensing at Applied Innovation. “They felt that our science was very strong in the areas that they were interested in and they wanted to see more of what is being done at UCI.”

Associate Director of Licensing Alvin Viray said, “It was impressive in not only the number of attendees but also who was there. I felt that the one-on-one partnering was fabulous.” Viray also noted that the digital track featured companies with healthcare-related applications in the wearable space, such as artificial intelligence and machine learning. He predicted that digital health and medical devices will be a bigger part of BIO in the future and will be important to the Orange County medical device industry.

BIO also provided a forum for UCI startups to present their business plans to potential partners and investors at the “Startup Stadium.” Two UCI-based startups developing cancer therapeutics pitched to an esteemed panel of judges:

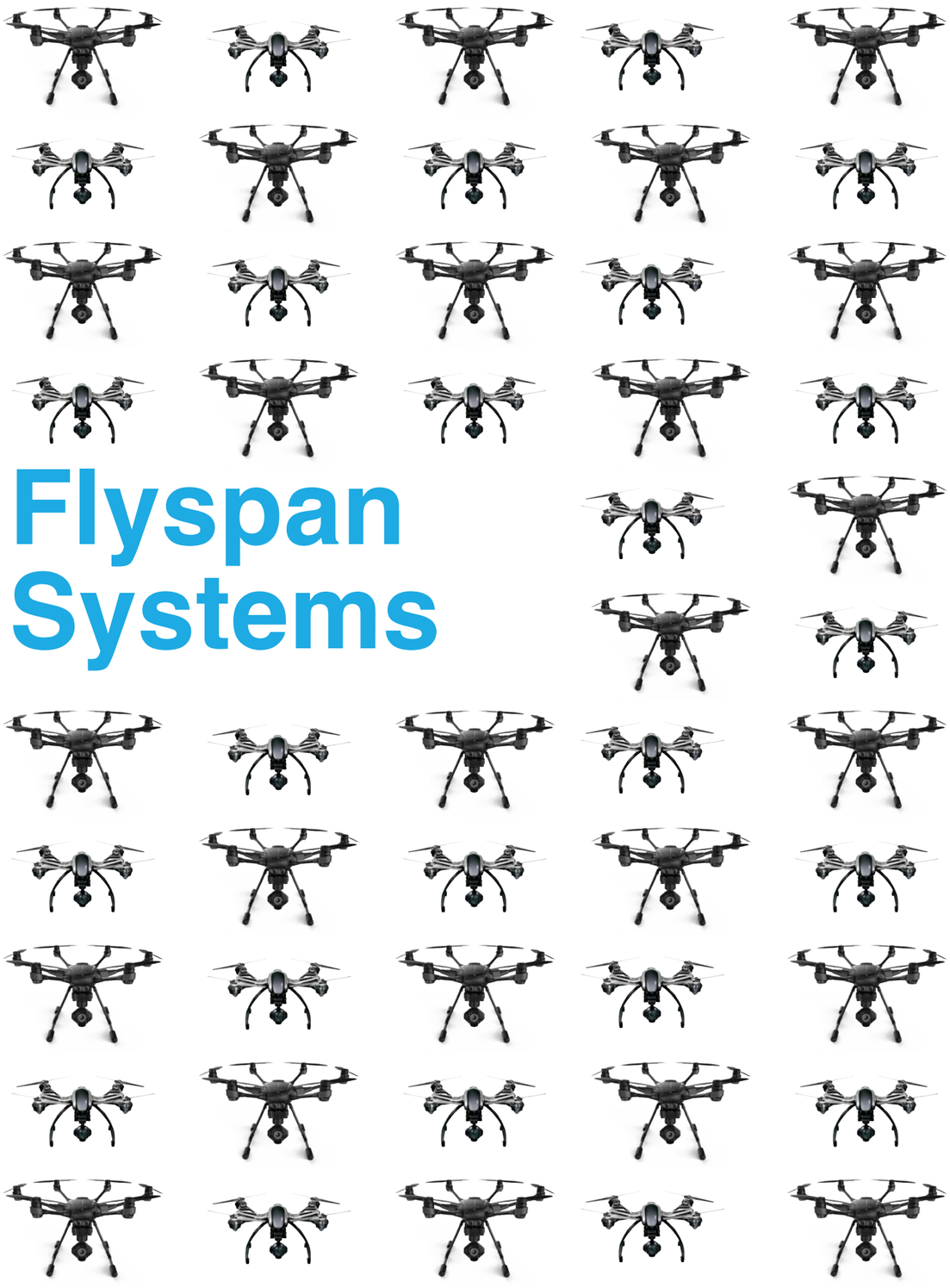
- Obsidio Therapeutics, founded by UCI professors Aimee Edinger and Stephen Hanessian, presented its therapeutic OBT-893 for difficult-to-treat cancers. Obsidio’s synthetic small molecule compounds are based on naturally occurring compounds like phytosphingosine, which are produced under stress in yeast to trigger amino acid transporter down-regulation and adaptive growth arrest. OBT-893 uniquely halts solid tumor growth by simultaneously disrupting all nutrient access pathways, starving cancer cells to death. Obsidio’s drug candidates are broadly effective and cancer selective, overcoming the resistance conferred by tumor heterogeneity and limiting the development of acquired resistance.

- Actavalon, co-founded by G. Wesley Hatfield, professor emeritus at UCI and company CEO, presented a therapeutics platform that can potentially treat multiple types of human cancers. Using a novel computational method supported by high-throughput genetic information, Actavalon is developing a pipeline of broad-spectrum mutant p53 tumor suppressor protein reactivation drugs.

Meanwhile, the Applied Innovation booth was buzzing with activity as their display showed a video highlighting the impacts of UCI research and technologies. Lalisa Stutts, IP marketing analyst and fellowship program manager, and ITG fellows Kate Rodriguez, Ahmed Khorshid, and Carol Pham engaged with attendees, educating them on Applied Innovation’s programs fostering technology transfer, industry partnerships, and startup innovations. “We saw a lot of traffic at our booth from people starting companies, patent attorneys, non-profit institutions and business development professionals from various pharmaceutical companies reaching out to us,” Pham said.

As Applied Innovation continues to facilitate the commercialization of research and technologies from UCI laboratories, the new relationships formed at this year’s BIO will expand the campus’ impact on the healthcare economy, both regionally and nationally. “The energy has been fantastic,” Artinger said. “We’re getting the impression that people are coming by because they’re hearing good things about the breadth and depth of innovation happening at the University of California, Irvine.”

Startup Spotlight



Flyspan Systems

Startup Spotlight:
The Flyspan Systems Team

Wayfinder startup Flyspan is solving the problem of drone fleet management through their intelligent decision making Software-as-a-Service (SaaS). With an ever growing drone industry that caters to a diverse range of markets ranging from agriculture, defense, energy, and more, the Flyspan team has identified the problems around gathering analytics and real-time data that companies using this technology need to be solved.

Founders Brock P. Christoval and Vinny Capobianco came together to start Flyspan in 2013 after meeting in their respective roles with the Department of Defense, one of the largest drone fleet operators in the world. By the time of the company's founding, Christoval and Capobianco built a body of expertise for their startup through careers as engineers in unmanned systems analytics, systems engineering, 3D printing, data science, and computational fluid dynamics. Additionally, both Christoval and Capobianco each founded startups before Flyspan, including companies such as Imagin3d Printing, Infinite Technology Design, and Earthaby, Inc.

Their previous expertise and research on the drone industry yielded insights into the challenges that arise when organizations want to bring drone technology to their businesses. "[Companies] will need a solutions provider with superior technical expertise in engineering things, from problem to solution," said Christoval, co-founder of Flyspan. The solution Flyspan developed is Flyview.io, a proprietary, integrated software platform providing analytics in real-time. With up-to-date information, users are empowered with the data from their drone fleet to make meaningful decisions in a timely fashion.

Discovering the Wayfinder program at Applied Innovation after exploring technology from UCI to potentially license, the Flyspan team applied for the competitive incubator program and was admitted. They have been part of the Wayfinder cohort since April of 2017. "The Wayfinder program at the Cove at UCI has given us access to amazing mentors and resources that we previously did not have access to. During our time as a Wayfinder team we have been able to grow our capabilities and partnerships," said members of the Flyspan team.

Flyspan has also received recognition from the Office of California Governor Jerry Brown. A highlight for the team includes the governor's office using Flyspan's published papers to study the potential of drone use - culminating in Flyspan participating in a panel discussion held in Sacramento on the potential of the commercial drone industry for the state of California.

A significant milestone in April of this year, Flyspan partnered with NASA to "tackle the crowded skies" through their drone technology. Alongside more than 70 of the world's foremost authorities on drones, Flyspan demonstrated its Flyview.io software at a Federal Aviation Administration (FAA) site for the Unmanned Aircraft Systems (UAS) Traffic Management (UTM) test. With no established infrastructure to enable and safely manage the widespread use of low-altitude airspace and UAS, NASA is exploring a UAS Traffic Management system for airspace integration requirements. An established standard would enable safe, efficient, low-altitude operations to potentially provide delivery of goods, infrastructure inspection, search and rescue, and agricultural monitoring services without interfering with buildings, larger aircraft, or other drones in the same space. Press coverage on the NASA partnership with Flyspan and the other organizations include Science X and Wired.

In the Ecosystem

Highlighting Stories Within the Orange County Entrepreneur and Innovation Ecosystem

Cybernaut Venture Capital

UCI Applied Innovation Welcomes World Renowned Venture Capital Firm as a New Cove Tenant

Leo Yong Gao, Vice General Manager for Cybernaut Green Tech USA.

The Orange County innovation and entrepreneur ecosystem has expanded its global reach as UCI Applied Innovation welcomes Cybernaut Green Tech USA Inc. as a new tenant at the Cove. Founded in 2005, Cybernaut is a venture capital and private equity firm specializing in early stage, middle stage, and growth stage investments. The total assets under Cybernaut's management are over 200 billion RMB (close to 30 billion USD). The company was ranked 15th in 2016 among other venture capital firms in China and also recognized as one of the best Venture Capital firms in 2015 by Forbes. Cybernaut has investment funds with regional teams specialized across industries which include green tech, new energy, fintech, AI, VR/MR/AR, big data, healthcare, medical device, education, and more. Successful investments by the firm include LianLian Pay, the fourth largest non-banking third party payment service provider in China; Focused Photonics, Inc., one of the world's leading manufacturers of analytical instrumentation for industrial process and environmental monitoring; and Spreadtrum Communications, one of the world's leading TD-SCDMA mobile phone chip R&D manufacturers.

According to Leo Yong Gao, vice general manager for Cybernaut Green Tech USA INC, the Orange County office at the Cove is the firm's first location in Southern California, preceding two additional offices opening in Silicon Valley and Silicon Beach respectively. Gao shared in a recent conversation that UCI was a draw for the firm to establish an office in Orange County due to the quality of technology emerging from IP generated at the university. Irvine is also a recognized hub for talent from China moving to the area to either build a company, work for an organization, or engage the entrepreneur/innovation ecosystem as an investor through an angel group or VC fund.

Cybernaut's US-based investment funds are looking for companies stateside that can potentially interact with their existing portfolio of over 200 companies. Gao also noted that Orange County's companies in the VR/MR/AR, medical device, biotech, and life sciences space had peaked the interest of the firm. As Cybernaut continues to explore opportunities and build new relationships in Orange County, Gao shared that the firm may eventually develop a fund for Orange County-based startups—a positive sign indicating continued international interest and collaboration around businesses in the OC region.

Jorg Lorscheider

Jorg Lorscheider has been involved with product development and manufacturing for over 25 years both as an employee and business owner. His career highlights include considerable experience running a startup and managing a very complex professional service business.

Jorg thrives on consulting with companies to apply his knowledge and creativity to help them improve. Currently, that involves developing a detailed understanding of manufacturing as a core competency and looking for opportunities to leverage best in class external resources to improve the bottom line. He has a large network of contacts and relationships in the medical device product development and manufacturing space and is open to helping the ecosystem through facilitating connections.

Given your expertise in the product development space as it relates to medical devices, what is the most common challenge that early-stage companies face and how can they overcome this?

I see a number of challenges that early-stage companies face, which includes overlooking the past. In the medical world, there are many issues that have been repeatedly solved by different companies, only for another company to fail trying to solve the same issue. I find that most early-stage companies are completely unaware of the history of related companies that have tried and failed to overcome a similar challenge. I almost think that this should be part of the investor presentation. There are a myriad of issues that this research could reveal including IP issues, pitfalls to avoid, team weaknesses etc. – and this would save investors some due diligence time as well.

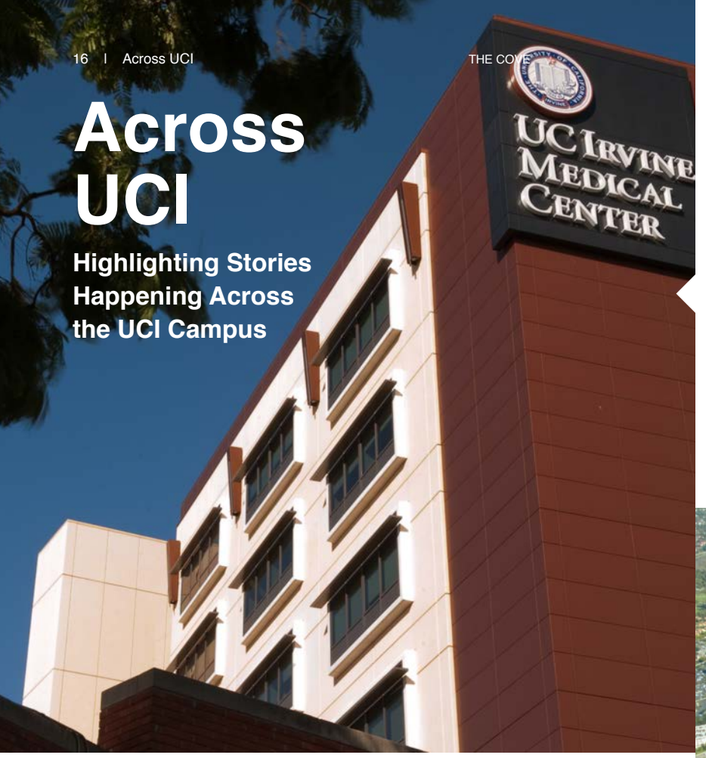
Consulting with numerous companies in a manufacturing capacity, what is the most important thing for a startup to consider when scaling the production of their device/diagnostic?

Funding: The first and most obvious is money. When you are scaling, you need to be experienced in asking for the proper amount of funds to do the job correctly. Most of the time, VC's and startups dramatically underestimate the amount of money that it takes to actually take a product all the way to production – especially a medical product with its regulatory burden.

Experience: One of the reasons for the underestimation of funding is the lack of experience. Since they do not have the experience, they underestimate the effort, which creates insufficient budgets and thus leads to underfunding. There are many experts and expert organizations that have designed and scaled products for manufacturing several times and have the knowhow to do it within a timeframe and set budget. Most startup companies don't want to hear the truth (or don't trust the vendor's motives) about how long it will take and how much money it will cost. This leads them to find alternatives that will not work such as thinking, "We can do this ourselves for less money." This is patently false, if the industry had a way to do things faster and for less money, it would be doing it all the time.

Keeping up-to-date on the latest medical and life science industry news and as a person who directly interfaces with companies in this space, have you observed a trend as it relates to startups who are securing funding and moving their business forward?

Partners: The companies that are progressing look to find partners that can attract investment. This is a big problem since most founding partners have dreams of running the company and making huge amounts of money. It is not in their nature to look for partners early on and to give away equity and control. I find that founders who can put aside their egos and attract a credible management team have a much better chance at attracting proper investors and succeeding long term. This is anathema to most academics and engineers who have founded companies. While founders are very talented, they do not have an investable reputation and this is important to secure funding now and in the future.



Across UCI

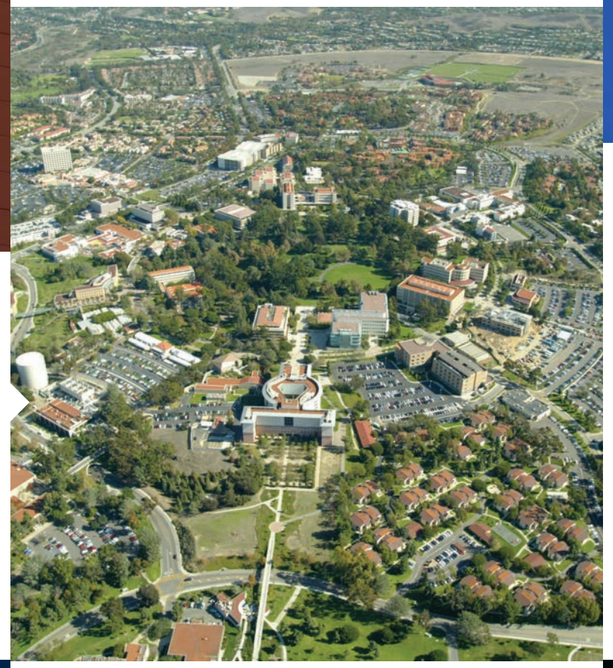
Highlighting Stories Happening Across the UCI Campus

From UCI News

UCI received its second-highest research funding total reaching over $378 million in grants and contract funding in 2016-2017, following a record year in 2015-2016 when UCI received $395 million.

From UC Irvine Health

U.S. News & World Report has recognized UC Irvine Medical Center as one of “America’s Best Hospitals” for the 17th consecutive year. The rankings recognize hospitals that excel in treating cases and this year showcases UC Irvine Health geriatric medicine and senior health services, ranking it 49th amongst similar programs across the nation



From the Paul Merage School of Business

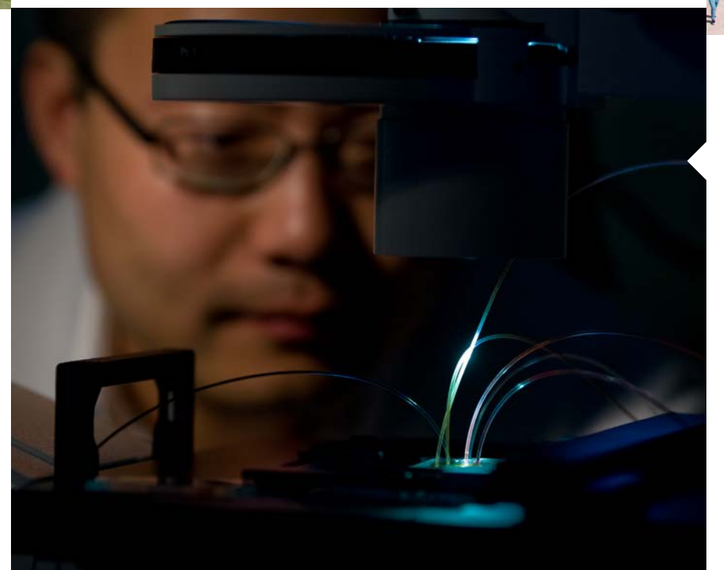
The UCI Center for Investment and Wealth Management (CIWM) hosted a luncheon where speakers discussed “Social Impact Investing: Strategies and Implications for the Future.” Social impact investing involves using investment strategies to promote social change while making a financial return.

From the Donald Bren School of Information & Computer Sciences

Senior computer science major and member of UCI’s powerlifting team, Santiago Martin, created the “Press Strength Training” app that allows users to track their workout routine progress to increase their skill levels. The app is available on iOS and Android.

From the Henry Samueli School of Engineering

The fifth annual Ingenuity: UCI Student Technology Showcase featured top student innovations from both the Donald Bren School of Information and Computer Sciences and the Samueli School of Engineering, including an education app that aims to prevent human trafficking as well as a medical device that identifies the type of stroke a patient is having before they reach the hospital.



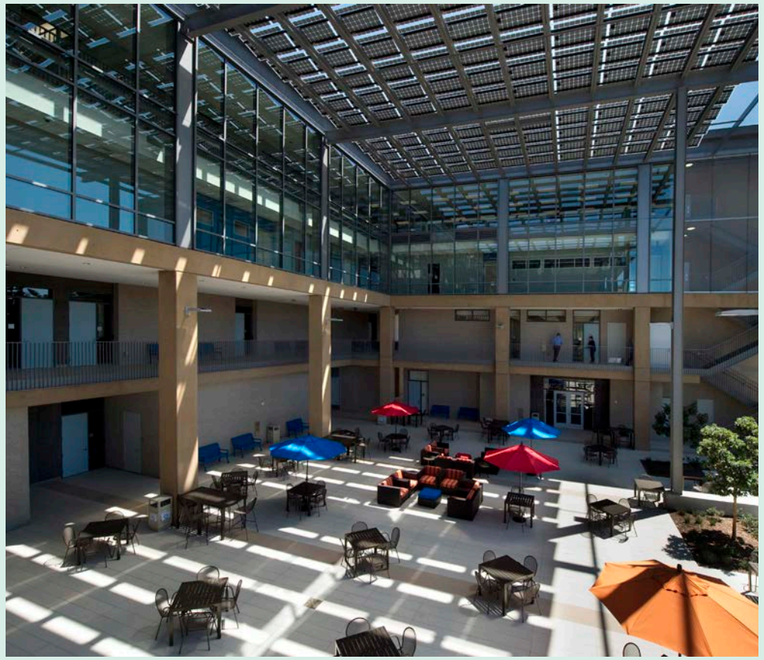
From UCI News

Weian Zhao, associate professor of pharmaceutical sciences, and colleagues have created a stem-cell based method that targets and kills cancerous tissue, while preventing some of the toxic side effects of chemotherapy.

Resource Spotlight

Highlighting Resources From the Innovation Ecosystem in Orange County

ACCESS UCI



Advantages
By enrolling in ACCESS UCI, you can take advantage of over 5,000 UCI undergraduate and graduate courses without formal admission to the university, based on available space and permission of the course instructor and/or department. Courses carry university credit, may count toward a degree, and are taught by distinguished UCI faculty. Enrollment in ACCESS UCI does not constitute admission to UCI.

ACCESS UCI is ideal if you are:

- Returning to school
- Completing degree requirements from another college or university
- Seeking professional development
- Considering applying for admission to UCI
- A lifelong learner
- Preparing for graduate or professional school

How many classes can I take?
You may enroll in a maximum of 2 courses not to exceed 8 units per quarter. Students intending to transfer course credit to another college or university should first verify acceptance of the course at that institution.

When are ACCESS UCI classes offered?
ACCESS UCI is offered during the fall, winter, and spring academic quarters.

How do I obtain a UCI catalogue or schedule of classes?
Course descriptions are listed in the UCI General Catalogue, online at catalogue.uci.edu. The schedule of classes can be viewed online at websoc.reg.uci.edu.

ACCESS UCI DCE website:
ce.uci.edu/accessuci

Tech Currents Spotlight

Markus Ribbe and Yilin Hu

In a high-ceiling room in professor Markus Ribbe's lab, a giant still emits pungent vapors from fermenting bacteria. Ribbe, chancellor's professor of molecular biology and biochemistry at the UCI School of Biological Sciences, and his colleague and wife Yilin Hu, assistant professor of molecular biology and biochemistry, are brewing fuel. They are harnessing nitrogenase, an enzyme derived from a common soil bacteria, to create hydrocarbons from carbon monoxide and carbon dioxide. The goal is to produce an affordable, truly renewable biofuel, as well as essential industrial products.

Brewing Up a Better Biofuel

The world economy still relies on carbon-based fossil fuels. Developing renewable alternatives that can compete with the cheap cost and energy density of fossil fuels is one of the biggest challenges of our time. Continued use of fossil fuels is unsustainable because of their steep and growing environmental costs, and for strategic reasons as well. Newer generations of alternative fuels are becoming more efficient and cost-effective to produce, but they still have technical and scale-up issues, as well as their own environmental costs. Currently, the main gating factor hobbling innovation in alternative fuels is the relatively low price of oil, but that will not always be the case.

Ribbe terms his lab's bacterial fuel factory concept a "fourth generation" solution. The discovery came about quite accidentally. Ribbe, a microbiologist, did his Ph.D. on microbes that can use carbon monoxide as a feedstock. In 2010, his lab was researching the properties of nitrogenase, a catalyst produced by Azotobacter vinelandii, a "completely harmless" common soil bacteria that has the ability to affix nitrogen in the soil to plant roots. Nitrogenase is a metalloenzyme, meaning it is metal based; the enzyme can be molybdenum or vanadium-dependent. The nitrogenase enzyme family catalyzes the reduction of nitrogen to ammonia, an important step in the global nitrogen cycle.

In 2010, Ribbe and his students were performing some simple kinetic experiments with an enzyme variation of nitrogenase. "We added carbon monoxide, which has always been believed in the field to be an inhibitor of ammonia formation," Ribbe said. "The electrons got sucked up by carbon monoxide. When the students injected some of the enzyme mixture in a gas chromatograph, they saw that it produced ethylene and propane. "At this point none of us believed it," Ribbe said. So they did another experiment, labeling the carbon atoms with a specific isotope. Under the chromatograph they found the labeled carbon atoms in the ethylene and propane. "We were not really looking for this," Ribbe said. "I would say it was a side discovery which was really the best of our lab."

Ribbe and his students found that this nitrogenase enzyme family could catalyze the reduction of carbon monoxide (CO) or carbon dioxide (CO2) to produce certain hydrocarbons under moderate conditions: normal pressure and ambient temperature—without requiring hydrogen; it can also use waste feedstocks like carbon dioxide and carbon monoxide to do so. "A very important aspect is that it is very environmentally friendly," Ribbe said.

A Bacterial Fuel Factory?

Ribbe hypothesized that the ability to reduce carbon monoxide could be an evolutionary relic of this particular enzyme family, and perhaps, this ancestral nitrogenase could be a link between the carbon and nitrogen cycles on earth. But whatever its antecedents, this peculiar property of Azotobacter vinelandii could potentially be harnessed to generate fuel and essential industrial products.

Currently, most hydrocarbon products for energy or the production of industrial plastics and rubber—including methane, ethylene, propylene, propane and butane—are synthesized via the Fischer-Tropsch process, a series of chemical reactions that converts a mixture of carbon monoxide and hydrogen

into liquid hydrocarbons and requires high temperatures and pressures, and lots of hydrogen to work. Hydrogen is energy-intensive to synthesize, requiring fossil fuels. The Fischer-Tropsch process makes an excessive amount of the greenhouse gas methane as a waste product.

Another essential industrial process, the Haber-Bosch method, is an artificial nitrogen fixation process. Using high temperatures and extremely high pressure, this process combines hydrogen and nitrogen derived from air over a catalyst to produce ammonia, critical for the fertilizer that enables modern large scale agriculture—and warfare. The Haber-Bosch method also requires a lot of energy, high temperatures and high pressures to work.

Next Step: Scale-Up and Industrialization

Ribbe envisions growing the Actinobacter vinelandii bacteria on industrial carbon waste to generate hydrocarbons. He and Hu found that the A. vinelandii strain that expresses the nitrogenase enzyme can produce methane (CH_4), ethylene (C_2H_4), ethane (C_2H_6), propylene (C_3H_6), propane (C_3H_8) and butane (C_4H_{10}).

So far Ribbe and Hu have optimized the bacteria to pump out the catalyst in greater amounts. Their lab is now engineering the enzyme to make longer-chain hydrocarbons for liquid fuel, with the goal of getting seven to eight chain carbon products. “Ideally, if you could get carbon monoxide and carbon dioxide as feedstocks, you could make them convert this into hydrocarbons,” Ribbe said. The researchers showed that nitrogenase can convert carbon monoxide and carbon dioxide into products like propane and butane. “This enzyme catalyzes at moderate conditions, room temperature and ambient pressure, and doesn’t need hydrogen,” Ribbe said.

Currently Ribbe and Hu are ramping up a process conducted in small flasks to a pilot bioreactor of perhaps five liters, and running continuous cultures to figure out how long it takes to produce hydrocarbons efficiently.

According to Ribbe, the next steps towards eventual large scale production of fuel and industrial products will be optimizing the reaction and developing bioreactors that can hold large quantities of immobilized nitrogenase enzyme, eventually leading to the manufacture of reactors driven by catalysts that mimic the action of the active site of the enzyme.

“What we envision is to build up a bacterial system where we can introduce an enzyme to carbon monoxide that is feedstock-free,” Ribbe said. “Bottom line, it is fairly different compared to other approaches to make biofuels.”

“It is amazingly simple,” Ribbe said. “At this early stage it works at low rates, 1 to 2% conversion of carbon monoxide.” Ribbe noted that the enzyme does this as a secondary reaction. To derive products such as propane, butane and ethylene, it is not necessary to do lipid extraction as with algae-based biofuels, which will save a step in production.

Scalability of the process to mass production will be the biggest challenge. “So far the catalytic numbers are fairly comparable to some Fischer-Tropsch methods,” Ribbe said. “One question is, how efficient is the catalyst? Industry wants a full conversion of substrate. While the Fischer-Tropsch process does a full conversion, our enzyme currently does a low percentage of conversion at a comparable efficiency.”

“I think this is really a different approach compared to other process that are out there,” Ribbe said. “The first generation, second generation, all other approaches are limited to fermentation processes. This system can directly convert carbon monoxide or carbon dioxide to hydrocarbons without going through a fermentation process. That is one big advantage.”

Next step for Ribbe is scaling up the fuel production process.

Company Spotlight:

Lyceum Pharmaceuticals

UCI-Based Startup Lyceum Pharmaceuticals Intends to Shorten Drug Discovery Path to Address Complex Diseases of Aging.

University of California, Irvine Applied Innovation announced the launch of Lyceum Pharmaceuticals, a company with the goal of quickly developing more powerful pharmaceuticals with fewer side effects to treat the chronic diseases of aging. Lyceum’s novel approach is based on a large collection of outbred fruit fly (Drosophila melanogaster) populations that can address the reproducibility problem in drug development to enable validation of research studies earlier in the pipeline, reducing drug development time and costs. Lyceum has exclusively licensed the fly populations from UCI Applied Innovation for use in scientific and commercial drug development. The University of California has taken an equity stake in the company.

“We have been publishing world-class genomics since 2010,” said Larry Cabral, Ph.D., Lyceum co-founder and CEO. “Our particular focus has been parsing entire genomes for the key determinants of aging and its associated chronic diseases. Lyceum is also developing new statistical approaches to determining the most important genomic sites and pathways underlying chronic diseases. With our animal resources and our genomic information, we have great inferential power for determining the biological foundations of chronic diseases, as well as for drug discovery.”

By using multiple outbred populations of animal models, Lyceum can conduct the large scale experiments needed to overcome the statistical problems of dealing with genomes that vary at more than a million locations. Lyceum’s research animals provide robust signals for the study of specific organs and their diseases, such as heart disease.

“We are excited about the launch of Lyceum, another startup originating from UCI’s strengths in biomedical research,” said Casie Kelly, Ph.D., assistant director of licensing at UCI Applied Innovation. “Their approach addresses the problem of reproducibility of clinical studies faced by the pharmaceutical industry. This is the sort of high-impact research that could help lower the industry drug attrition rate, and help bring drugs to patients more quickly and at lower cost.”

Rethinking Research Organisms: UCI Drosophila

Biomedical research depends on model organisms like fruit flies. A serious problem in early stage drug discovery is lack of reproducibility. “Inbred model organisms have led the pharmaceutical industry astray,” said Michael Rose, Ph.D., Lyceum co-founder and UCI professor of ecology and evolutionary biology. “When organism populations are inbred from small, contained populations, they accumulate unpredictable mutations, making study results challenging to reproduce. There is also an issue of applying conclusions based on inbred organisms with unpredictable mutations to humans, which are outbred and diverse.”

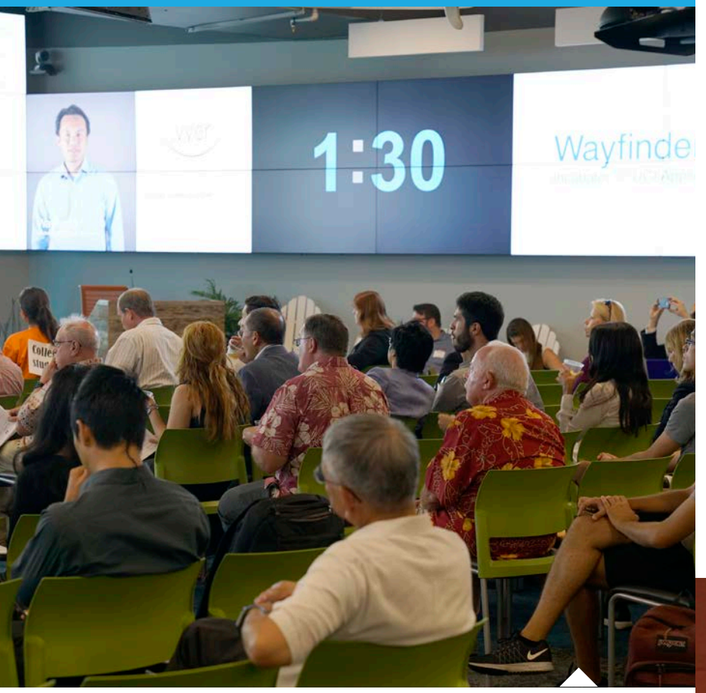
Lyceum’s Drosophila populations were developed in the labs of Rose and UCI professor of ecology and evolutionary biology Laurence Mueller over the course of four decades. Unlike nearly all other research animals, these Drosophila populations are not inbred. Like humans, these Drosophila have large genetically diverse populations, and are physiologically robust. These populations have been extensively characterized functionally, physiologically, and genomically, making them an ideal starting point for pharma R&D.

About Lyceum Pharmaceuticals

Lyceum is dedicated to the development of more effective pharmaceuticals with fewer side effects. The company is building new biological tools based on genomics, experimental evolution, and statistical learning to address the complex multifactorial diseases of aging.

For more information, visit: http://www.lyceum.life

Making Waves



Wayfinder Incubator Highlights

Wayfinder incubator teams made significant progress over the summer. Highlights include startup teams Adaptifyed and Flexbooth receiving grants on their patents, Syntr winning the Institute for Clinical and Translational Science's Shark Tank Competition during the Pathways to Cures event which brought together innovators, the academic community, and industry for a day-long session at the Cove. Wayfinder startup Yummi traveled to Hong Kong to engage with key industry contacts at the globally recognized RISE conference. Additionally, Dr. Rehema Feleke, CEO of Wayfinder team FunBand Inc., was nominated for the Orange County Business Journal's Innovator of the Year Awards. The ANTrepreneur of the Year Awards also took place at the end of the academic year, and recognized Wayfinder team Failsafe as the "Best Female-Owned Business."

Wayfinder Startup FunBand Nominated by OCBJ for 2017 Innovator of the Year Award

On August 14, the Orange County Business Journal announced the nominees for its Third Annual Innovator of the Year Awards. UCI Applied Innovation is proud to announce that Dr. Rehema Feleke, CEO of Wayfinder team FunBand Inc., is among the 2017 nominees.

FunBand is an award winning startup from Irvine, CA with a hassle-free kid tracker that parents can rent at amusement parks to keep track of their children. Feleke developed Funband's FunLoop after experiencing a close call at an amusement park involving a friend's child. FunBand intends to supply FunLoop to amusement parks, county fairs, and zoos.

At UCI, Feleke earned her Healthcare Executive MBA at the Paul Merage School of Business in 2016. During this time, FunBand won first place at the New Venture Competition. Additionally, FunBand won "Best Presentation" at the Orange County Tech Coast Angels Fast Pitch Competition in March 2017.

From Left to Righ: Wayfinder EiR Dan Jenkins and the FunBand team, Dr. Rehema Feleke, CEO, and Simon Loo, CTO, at the Tech Coast Angels Celebration of Entrepreneurship Fast Pitch Competition earlier this year.

Dr. David J. Cuccia, Ph.D., CEO and CTO of Modulated Imaging, Inc.

Modulated Imaging Raises Series A Round

Modulated Imaging, Inc. a company founded by UCI alumnus David Cuccia, Ph.D., has successfully closed their Series A financing round. The additional capital will help the Modulated Imaging team push forward as they work to show clinical value in the platform technology they have created. Modulated Imaging builds light based imaging devices that give professionals transformative tools for preventing, diagnosing, and curing medical skin conditions. The company's unprecedented science profoundly impacts the health and resilience of skin, and increases quality of life.

Originally housed within the Photonic Incubator at the Beckman Laser Institute at UCI, the company has since expanded to a 6,000 sq. ft. building in Irvine. Earlier this year in January, Modulating Imaging announced that it received clearance from the FDA for its Ox-Imager CS technology. This device is designed to assist clinicians with the identification of lower limb vascular issues, so that patients can receive appropriate, timely treatment. With FDA authorization, Modulated Imaging can now launch the technology at clinical centers throughout the United States.

Velox Biosystems Successfully Closes Recent Funding Round

Velox Biosystems, a startup that has graduated from the Cove incubator program and moved into a new lab in Irvine, has successfully closed their pre-Series A funding round with Decheng Capital. A highly respected and sought-after VC in Velox's market space, Decheng will serve as a partner to help the company position itself for the next stage of growth and lead the Series A round for Velox. Additional highlights from the Velox team include completing their C-corp conversion, adding a Board of Directors, setting up an Incentive Stock Option plan, and expanding their team to keep up with the rapid growth.

Byron Shen, CEO of Velox.

SEPTEMBER TIDES

For a complete list of upcoming events visit:
innovation.uci.edu/events

9.01.17	Friday	12:00 pm	Lunch and Learn with Robert Weber, Alexis Munger, & Anton Plotkin
9.06.17	Wednesday	8:00 am	1 Million Cups
9.06.17	Wednesday	1:00 pm	Sustain OC: Smart CCA
9.08.17	Friday	12:00 pm	Lunch and Learn with Kevin Lam
9.08.17	Friday	6:00 pm	Inventors Forum Speaker Series
9.11.17	Monday	4:10 pm | 7:20 pm	Monday Night Football (Double Header)
9.12.17	Tuesday	7:00 am	SBIR Road Tour
9.13.17	Wednesday	8:00 am	1 Million Cups
9.13.17	Wednesday	6:30 pm	OC ACM Meeting
9.14.17	Thursday	6:00 pm	Business Health Check & Expo
9.15.17	Friday	12:00 pm	Lunch and Learn with Dionne Mischler
9.15.17	Friday	4:00 pm	Wayfinder Showcase Event
9.19.17	Tuesday	7:00 am	OCTANe's Coffee at the Cove
9.19.17	Tuesday	12:00 pm	JLABS: From Chemical to Drug - The Path to a Small Molecule IND
9.19.17	Tuesday	6:00 pm	TCVN Workshop
9.20.17	Wednesday	8:00 am	1 Million Cups
9.21.17	Thursday	7:00 am	ENP: Innovation & INtrapreneurship
9.21.17	Thursday	6:00 pm	Tech in Motion: 3rd Annual Timmy Awards
9.22.17	Friday	12:00 pm	Lunch and Learn with Liz Goodgold
9.25.17	Monday	5:30 pm	Monday Night Football
9.27.17	Wednesday	8:00 am	1 Million Cups
9.29.17	Friday	12:00 pm	Lunch and Learn with MO Studio

Cove Currents Contributors:

Past Tides:
Wendy Wolfson
Hai Truong
Natalie Rose Gomez

Startup Spotlight:
Hai Truong
Natalie Rose Gomez

Tech Currents Spotlight:
Wendy Wolfson

Editors in Chief:
Matt Bailey
Nick Miede

Managing Editors:
Vanessa Chavez
Hai Truong

Copy Editors:
Hai Truong
Charlotte Densham
Natalie Rose Gomez

Design Director:
Ryan Mahar

Designers:
Kelsey Thornton
Jacqueline Kao

Photo & Video:
Shan Jiang
Yuxin Cha
Hai Truong
Matthew Morris

UCI Applied Innovation

5141 CALIFORNIA AVENUE
IRVINE, CA 92697-7700
949-824-COVE (2683)

email: cove@uci.edu
website: innovation.uci.edu
news: currents.innovation.uci.edu

1095.01