Developing novel, noninvasive solutions to address the needs of clinicians and patients alike.

Dr. Petra Wilder-Smith

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AVIAA Spreads Wings into Irvine and Beyond

Cruising the Clouds and Pitch Decks with John Lasko

The Life of an Industry Sponsored Research Agreement at UCI
A PERSON WHO NEVER MADE A MISTAKE NEVER TRIED ANYTHING NEW.”

– Albert Einstein

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Stay up-to-date with news about UCI’s innovations and commercially promising technologies. Find this issue of Rising Tide at innovation.uci.edu/news.

If you have story ideas, contact the editor-in-chief: connorj@uci.edu
Bill Waldo, expert senior consultant at SBDC @ UCI Applied Innovation, shares tips that have helped SBDC clients raise millions in capital for their businesses.

Executive Next Practices’ Building Innovation & Growth / January 2019
Kate Klimow, chief administrative officer and director of external relations at UCI Applied Innovation, and event attendee Paul Pancoe discuss Orange County’s innovation ecosystem and ways to support growth, investment and traction.

POP Grants Award Showcase / November 2018
Ron King, senior director of research translation programs at UCI Applied Innovation, hosts the Proof of Product (POP) Grants Award Showcase for third-round awardees of UCI Applied Innovation’s POP Grants. The event featured nine short presentations and status updates for UCI technologies.

Wayfinder Showcase / December 2018
Wayfinder teams from cycle eight in the Wayfinder program mix and mingle before the Wayfinder Showcase Event. The event gives teams graduating from Wayfinder the opportunity to highlight their accomplishments throughout the program in a presentation to the UCI Applied Innovation community.

Learning Ovations / January 2019
Amanda Jacobs, director of School Outcomes at Learning Ovations, and her team of Literacy Outcomes Specialists get the audience excited during a two-day retreat at the Cove @ UCI.

1 Million Cups
DATE: Every Wednesday
TIME: 8 to 9 a.m.
Two startups give a six-minute presentation after which the audience asks questions and gives feedback with the intention to help the presenting startups grow. Free to the public. Coffee and tea are provided.

MARCH 2019 / UCI APPLIED INNOVATION / RISING TIDE

The Cove @ UCI is host to more than 700 events per year in support of innovation, entrepreneurship, industry and the community. Take part! Check out and register for upcoming events: innovation.uci.edu/events
The SBDC Knows the ABCs of Business

**SBDC @ UCI Applied Innovation**

Provides free consultation with experts in life science and tech fields.

Forming a technology startup is never easy. Besides inventions and patents, teams must know how to present a pitch deck, find investors, work through government hurdles and more. Through its consulting services, the Small Business Development Center (SBDC) @ UCI Applied Innovation reduces confusion around these and other pain points.

The SBDC program, funded in part through the Small Business Administration (SBA), comprises 63 networks and more than 1,000 locations throughout the United States. The Orange County Inland Empire SBDC Network, one of five networks in California, is the second-highest-performing network in the country and includes the one at Applied Innovation. Applied Innovation became the new host of the SBDC in January 2018. With this new relationship, the SBDC leverages many of the university’s resources* for its clients and provides the university with more community connections.

The facility itself just generates excitement,” said Bill Walds, senior consultant, SBDC @ Applied Innovation. “When an entrepreneur walks in here they start to feel like they’re in business because they feel the energy of the Cove @ UCI.”

SBDC business consultants offer no-cost, one-on-one, confidential consulting services primarily for technology, life science, med-tech and med-device business sectors. Consultants are experts in their fields and often discuss topics like funding-readiness, finding investors, marketing and sales strategy, commercialization and government funding.

Additionally, the SBDC offers several educational workshops and events at the Cove throughout the year, which are generally free and open to the public. These events cover a wide variety of topics related to starting a business.

“We have a broad network of resources for anybody,” said Julie Cranston, director, SBDC @ Applied Innovation. “As hard as you want to work, that’s as fast as you’re going to get your business going.”

To book an appointment, email Julie Cranston at julie.cranston@uci.edu

For more information about SBDC @ Applied Innovation, visit sbdtech.com/uciappliedinnovation

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**Additional Resources**

innovation.uci.edu/resources/

Cove @ UCI
innovation.uci.edu/the-cove

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The ABCs of Business


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**Available Technologies**

**Coming Down the Pipeline**

**Some of UCI’s Top Available Technologies Curated by UCI Applied Innovation’s Invention Transfer Group**

The Invention Transfer Group manages over 1,000 inventions from UCI researchers spanning the areas of engineering, medicine and life sciences, physical sciences, communications and computer sciences. These innovative technologies are available for licensing.

**Tech ID #: 20564**

**Method and Apparatus for the Assessment of Gingival Blood Flow**

A novel application of laser speckle imaging to measure blood flow in the gingiva/gums. Such measurements are important as an indicator of gingival inflammation. It is a good early marker for onset and treatment response in patients with gingivitis.

Bernard Choi, Ph.D. / Beckman Laser Institute

Licensing Officer
Doug Crawford, MBA
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**Tech ID #: 30048**

**Multi-Tone Continuous Wave Lidar**

Object detection and ranging is a fundamental task for several applications such as autonomous vehicles, atmospheric observations, 3D imaging, topography and mapping. UCI researchers have developed a light detection and ranging (LIDAR) system, which makes use of frequency modulated continuous waves (FMCW) with several simultaneous radio frequency tones for improved speed of measurement while maintaining robust spatial information.

Ozgul Boyraz, Ph.D. / Henry Samueli School of Engineering

Licensing Officer
Doug Crawford, MBA
doug.crawford@uci.edu

**Tech ID #: 14953**

**Methods and Devices to Measure the Dynamics of Tear Film and Its Components**

Researchers have developed a noninvasive method to measure the dynamics of tear film and its components in the human eye. It can be used specifically to detect and diagnose dry eye syndrome.

Enrico Gratton, Ph.D. / Henry Samueli School of Engineering

Licensing Officer
Steve Hym, Ph.D.
shym@uci.edu

**Tech ID #: 29835**

**Optical Coherence Tomography to View, Assess and Count Hair Follicles**

A portable imaging system for assessing the condition of hair loss. Optical coherence technology is adopted to provide an accurate, wide view and fast imaging solution. The system provides precise insight on the health of the hair follicle and its potential to regrow new hair, which is crucial for assessing the efficacy of hair regrowth treatments.

Zhongying Chen, Ph.D. / Henry Samueli School of Engineering
Natasha Mesinkovska, MD / UCI Health

Licensing Officer
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*Resources Mentioned in this Story

Additional Resources
innovation.uci.edu/resources/

Cove @ UCI
innovation.uci.edu/the-cove

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**Finding all UCI available technologies at innovation.uci.edu/tech**
“It was such a hot time to be doing AIDS research,” said Hayes. “But I decided that growing mold wasn’t going to work for me, and it was all just so slow, so when I went back to school I changed my major from molecular biology to computer science.”

Her decision to pursue computer science as a second major unveiled a newfound passion. “I just fell in love with computer science and seemed to excel in classes that were considered more challenging, where in bio I had struggled,” said Hayes. That small change set the foundation for what is now Hayes’ career as UCI professor of informatics and, as of January 2018, CEO of startup company AVIAA. AVIAA is an international group purchasing organization for business aviation started in the U.K., now headquartered here in Irvine with offices worldwide.

With a goal to drive more transparency in the general aviation industry, AVIAA strategizes ways of using the data they collect to improve the most efficient spending habits possible for aviation product buyers and sellers, professionalizing the entire procurement process and reducing friction costs for all involved. “On the surface, the company is very much a group purchasing organization focused on professional procurement for business aviation,” said Hayes. “Under the guts of that, we’re really basically a software as a service (SaaS) company that’s very focused on data.”

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In December 2017, AVIAA founders asked Hayes to take over running the company as CEO and move to their home base in England. However, her research on business aviation combined with her desire to maintain her UCI connection grounded her in Irvine. “The U.S. is still by far the biggest market for business aviation in the world,” said Hayes. “There are massive growth rates in Asia, Africa, the Middle East and Europe, but the U.S. and Europe are the most mature markets. We just have the most jets.”

Aimed at being a one-stop shop for business aviation owners, operators and suppliers, AVIAA helps customers balance value equation with sophisticated data analytics. “Anyone can look at a rate sheet and say ‘ah, it’s cheaper over here,’” said Hayes. “But what we see is this desire by our membership to actually get high-quality services. They need to make sure that all the services – like fuel, catering, cleaning – are going to be available, will be served well, and at a fair price. So, it’s not just about price.”

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Paired with wanting to maintain her relationship with the UCI community and her startup team, AVIAA became a Cove @ UCI tenant in 2017 where the team utilized the talks and networking events. Within one year, AVIAA nearly tripled in staff size. Alongside its sister startup company, Assure Point, a next-generation suite of insurance products that cost at least 20 percent cheaper than market price, AVIAA graduated from the Cove to a 3,600-square-foot office space in Irvine’s Park Place in August 2018.

“Working with Gillian and her AVIAA team has been great for us at Assure Point and has helped each company have better perspectives on effective tactics,” said Aaron Soto, chief architect of Assure Point. “It’s great to have such a direct connection to Gillian and her team.”

In January, AVIAA also acquired their European counterpart, Convolus. With the acquisition, AVIAA now has an office in Munich, Germany, in addition to their locations in Park City, Utah, and Oxford, England.

“Having a really solid high-quality handling network across Europe that’s also servicing planes at a good value is a huge thing for our members,” said Hayes. “Convolus provided that network. They also have a complete European fleet of aircraft.”

The agreement added 150 new aircrafts to AVIAA’s fleet, which will support a member fleet of nearly 500 private and commercial aircrafts in addition to a larger network of suppliers and global operations.

As CEO and UCI professor, Hayes frequently draws her inspiration from AVIAA employees and her students.

“They constantly keep me motivated,” said Hayes. “I can see that they’ve had situations with bad bosses or professors, and I certainly make mistakes, but all I want to do is make a really cool place for people to work and study and be the best they want to be. That’s what really motivates me more than anything else.”

Through AVIAA and her classroom, Hayes continues to blaze trails for women in computer science and is passionate about incorporating more women in the industry.

“The CEO of the company we just bought, who is now going to be my managing director in Europe and the Middle East, is a brilliant woman,” said Hayes. “Right now, exactly half of our 16 employees are women. That’s exceedingly rare in business aviation and in tech.”

According to the Pew Research Center analysis, despite research showing that women make up three-quarters of healthcare practitioners and technicians classified within the STEM fields, women remain underrepresented in computer science, making up only 25 percent of the U.S. population’s career field.

The U.S. Department of Labor estimates that from 2016 to 2026, computer and information technology occupations are projected to grow 13 percent faster than the average for all occupations, adding 557,100 new jobs with the demand.

“We need a lot more people thinking computationally and doing computational type work,” said Hayes. “We’re not expanding the field the way we need to be.”

For business aviation, AVIAA will continue to expand their global market presence and launch a second platform for their software service by May. As CEO, Hayes’ personal goals with AVIAA are well within reach too. With immense support from her founders, Hayes aims to take the company to new heights, as well as encourage women in STEM fields and women entrepreneurs to forget stereotypes and pursue their passion.

“As women, we’ve often been socialized to build collaboration, to build consensus,” said Hayes. “Most of the time, that’s how I lead. However, as a startup CEO, sometimes you just have to be strong. You don’t have to be rude about it, but just stand by your decision.”

With Hayes piloting AVIAA’s ever-growing future in the business aviation industry, coupled with her passion for computer science, the sky is the limit.

Find out more information about AVIAA at aviaa.com/
DEVELOPING NOVEL, NONINVASIVE SOLUTIONS TO ADDRESS THE NEEDS OF CLINICIANS AND PATIENTS ALIKE.

Dr. Petra Wilder-Smith
THE BECKMAN LASER INSTITUTE & MEDICAL CLINIC'S
HAS AN EYE FOR OPTICS

Along West Peltason Drive sits an unassuming red-roofed building otherwise known as the Beckman Laser Institute & Medical Clinic (BLIMC). Inside, through a maze of hallways, doorways and stairwells, is the office of Dr. Petra Wilder-Smith, director of dentistry at the BLIMC and professor of surgery at the UCI School of Medicine. In her office and in labs throughout the facility, Wilder-Smith studies oral cancer and devises novel, noninvasive optical techniques for medical purposes.

A BETTER WAY

After finishing high school at 16, Wilder-Smith faced a question many are familiar with: What am I going to do next? A few visits to a friend who was attending dental school in London at Guy’s Hospital was all she needed to convince herself to do the same. Despite not knowing much about dentistry beyond that Guy’s Hospital was the best dental school at the time, she applied and was accepted into the five-year program. The first two years were “marvelous,” as she puts it, studying subjects like physiology, pharmacology and biochemistry. When the third year came around and pre-dental clinics began, she soon realized that dentistry was not for her.

It began with a patient who exhibited nonvisual symptoms of oral cancer. After following her supervisor’s instruction to take multiple biopsies, which all came back as negative for oral cancer, Wilder-Smith thought her work with the patient was complete. Her supervisor informed her otherwise, as more biopsies were needed to discover the cause of the symptoms. Much to the patient’s dismay, Wilder-Smith took a few more biopsies, one of which eventually came back positive for pre-malignant oral cancer. As is the case with other patients in this scenario, the patient was instructed to return every six months for biopsies to monitor her condition. And just like nearly 80 percent of patients over a three-year period who receive these instructions – according to Wilder-Smith – her patient did not return.

And so began Wilder-Smith’s journey, summed up by her statement of displeasure with the status quo: “There has to be a better way.” Having liked oral medicine, yet concerned about the way it was being approached clinically, Wilder-Smith went to her oral medicine professor and asked him to be her mentor.

During her final exam, Wilder-Smith told her examiner, “This is the last filling I’m ever going to do in my whole life.” And it was.

SIGHTS SET

With her newfound mission to study oral medicine and oral cancer, Wilder-Smith went to the University of Bern in Switzerland where she received her doctorate of dental medicine, and then to Heidelberg University in Germany where she received a specialty license in oral medicine. But something was still amiss.

“Why are we so bad at this,” Wilder-Smith recalled asking herself. “You can’t detect or diagnose it visually. If you look at it, you might as well toss a coin; you don’t know if it’s an ulcer, a burn, an autoimmune thing or cancer.”

And with biopsies as the only way to diagnose oral cancer, clinicians find it hard to keep patients returning when they find out they need to be biopsied regularly to monitor their condition.

“No one is going to let you take a chunk out of their mouth every six months; it looks horrible and it hurts,” said Wilder-Smith.

After joining the BLIMC in the early ’90s, Wilder-Smith knew that a noninvasive approach was the best way to ensure better oral cancer management. She took it upon herself to understand the basic science behind noninvasive techniques by attending Aachen University in Germany to complete a Ph.D. program in biomedical imaging.
FILLING THE GAPS

Wilder-Smith’s work at the BLIMC currently focuses on all the problems associated with oral cancer, from determining a patient’s risk level and monitoring those at risk, to using advanced imaging techniques to identify cancerous tissue at the molecular level.

According to Wilder-Smith, the detection and recurrence rates of primary oral cancers are horrendous, with oral cancer being the only major cancer whose outcomes have not improved in the last generation. Because of this, a large part of her work revolves around devising ways to provide the most at-risk populations with screening and monitoring.

Compounded by risk factors like dietary insufficiencies and smoking and drinking habits, the people who need the most help are often those who have the least access to medical treatment. Her work with aid groups has taken her to rural parts of India, Turkey and China where access to medical care is scarce. These experiences have shaped her and her team’s understanding of the barriers faced by people in low-resource environments.

Based on the information gathered in these rural areas, Wilder-Smith and Dr. Hongguang Liang, professor at the College of Optical Sciences at the University of Arizona, worked together to design and create oral probes that attach to smartphones, allowing anyone who can operate a smartphone to take images of the oral cavity. Once the photos are collected, the accompanying smartphone application runs a sophisticated image-processing algorithm to make informed analyses on whether or not the photographed tissue is at risk. From there, the images are wirelessly transmitted to a remote specialist who can diagnose and provide a treatment plan depending on the severity of the patient’s case. In India, with help from an Indian philanthropic organization, 400 community workers participate in ongoing projects to bring oral cancer screenings to low-resource areas. Many of these community workers are utilizing these devices and providing regular feedback on how to further improve them.

Even providing access to screenings can offer substantial improvements, as Wilder-Smith has seen oral cancer mortalities decrease by 30 percent in the parts of India where these projects are underway. Additionally, outcomes have improved because oral cancer is caught at earlier stages, which requires less-invasive surgery.

NEW TECHNOLOGIES

Her pursuits do not stop at designing portable oral cancer screening devices for low-resource populations in the developing world. Wilder-Smith also works with engineers to develop advanced imaging to map cancerous tissues in the mouth. The problem the team aims to solve is this: How do you determine where a cancerous lesion begins and ends when that information can only be seen at the molecular level?

The current surgical approach is to identify where the microscopic edge—or margins—of the lesion is, and then remove one and a half centimeters around the lesion in three dimensions in hopes of removing all of the cancerous tissue. Remove too little and the cancer might remain; remove too much and a patient might have problems swallowing, eating or talking.

“There’s no way we should be excusing with such wide margins,” said Wilder-Smith. “My goal is to use our highly sophisticated imaging tools to map the molecular risk so that we can tell the surgeon when they need to plan the surgery, and then intraoperatively, how close they can keep the excision to the tumor margins and still keep a minimal risk of recurrence in the patient.”

This technique aims to improve outcomes for patients, could reduce the number of surgeries required and provide patients with a higher quality of life post-surgery.

Another area Wilder-Smith focuses on is entirely new to her: starting a company. Based to a large extent on their patents at the BLIMC, Wilder-Smith and her colleague Cherie Wink, assistant research specialist, think about some of the biggest challenges clinicians face and try to fix them, mainly through improving on medical instruments.

One such improvement they are working on is finding innovative ways of reducing airborne transmission of disease from devices – like ultrasonic scalers, craniotomes and bone saws – that are known to send tiny droplets of biological material into the air. By eliminating bacteria in the droplets before they go airborne, the risk of infecting patients hours, or even days, after their unintended release can be reduced.

Their new experiences of licensing patents and starting a company has led them to UCI Applied Innovation, where they release licensing guidance from Doug Crawford, senior licensing officer, and business consulting from Molly Schmid of the Small Business Development Center (SBDC) @ UCI Applied Innovation.

“What I’m most excited about is learning how to be a startup; learning how startups work, learning how business works, learning how intellectual property and technical know-how translates into building a viable business, and all of the variables that go into that,” said Wilder-Smith. “I’ve never done it and I love it.”

Wilder-Smith and Wink build prototypes based on their patients with the intention of licensing and developing them with large dental or medical companies.

THE UCI DIFFERENCE

What makes her work especially gratifying, she says, is not only the interdisciplinary structure of the BLIMC, but also the collegial nature of the university as a whole. Whether for projects need engineering, computer science, materials science or even artificial intelligence support, UCI faculty are just a phone call away and always willing to lend a hand.

“I’ve never had someone say, no, I don’t have time,” said Wilder-Smith. “It’s always, ‘cool, yeah, let’s do this.’ I think UCI is very unusual in that regard. I think we’re very fortunate.”

Together, Wilder-Smith, her colleagues and UCI faculty at large are making strides toward the BLIMC’s vision of moving innovative technologies from “benchtop to bedside” to improve lives in all communities, in the U.S. and abroad...
“I took [Quicksilver], a faltering company and created the strategies both from the engineering side as well as the marketing side and we became the number one ultralight and light sport aircraft manufacturer in the world,” said Lasko. “Aviation was, let’s say, my launching pad, but I always had an interest in science.”

The success of Quicksilver allowed Lasko to travel the world, building up the company. He soon became one of the top competitive ultralight aircraft pilots in the world, so much so that he was featured in National Geographic magazine’s August 1983 article “The Bird Men.”

However, Lasko’s interest progressed toward the medical/life science space when he attended the World Congress American Academy of Anti-Aging Medicine in 1993, where he wrote the business plan for a medical student who wanted to start his own clinics in the U.S. and abroad. And, he has continued to work with entrepreneurs.

“One of the things I teach entrepreneurs is how to craft a pitch desk and how to get an appointment,” said Lasko. “You really want to get an investor at ‘hello’ because if you don’t get them within the first 15, 20 seconds, they’re yawning and looking at their text messages.”

Over the years, Lasko has worked with many startups on getting them into major corporations and organizations. He helped connect a professor from Oregon State University to NASA to develop a Near Earth Observation System. Lasko also introduced analytic software to several Fortune 500 companies, as well as MycoTechnology’s food technology to companies like Pepsi. He also advised an engine maker to create a new aircraft engine from a clean sheet of paper, which now has an 83 percent worldwide market share and powers most new small next-generation airplanes.

In 2017, Lasko joined UCI Applied Innovation’s Experts-in-Residence program – now known as the Innovation Advisor program – which is a network of business leaders who volunteer their time to mentor UCI-affiliated startups. He has been an advisor for several UCI Applied Innovation startup companies, including Purist and HUMBLE Technologies.

“John was always very supportive of my entrepreneurial endeavors, both from a presentation and pitch deck perspective,” said Leila Safavi-Tehrani, CEO of Purist, a company that focuses on low-cost rapid production and distribution of radioactive supplies. “If I was participating in any event, he would introduce me to different people he thought would benefit my startup. He was always very encouraging and responsive and has a great upbeat attitude.”

When pitching to investors, Lasko emphasizes simplicity in a startup’s pitch deck and encourages every slide to have an impact and be understandable without explanation within a few seconds. He also teaches the psychology of how to ask for and get the appointment with the investor.

“When someone asks what you do, get it out in 10 seconds and shut up,” said Lasko. “Don’t ramble at people; really focus on the key two or three subjects, or what I call the 10 seconds to catch. If they are interested, they’ll ask questions so you can explain more.”

Book an appointment with Lasko at lasko@usa.com.
Industry Sponsored Research (ISR) agreements, or contracts, contain the agreed upon terms for research conducted at the university and funded by a company, and are initiated when a company is interested in having the university investigate a research area of mutual interest. ISR enables the sponsor, UCI, and the public to benefit not only from the generation of new knowledge, but also from the societal and economic rewards from the commercialization of innovations that result from the research. Other advantages include access to renowned researchers and laboratories for sponsors, and the furthering of cutting-edge research for the university.

Once the scope of work and budget agree, several things happen:

1. The faculty member’s department enters the budget and scope into the UCI database and initiates the departmental approval process.
2. An ISR officer and the company start negotiating the ISR agreement.
3. The faculty member discloses any conflicts of interest.
4. If any data/samples/materials are provided by or exchanged between the university and the company, ISR officers will negotiate and execute the terms of a Material Transfer Agreement (MTA) or Data Use Agreement (DUA); MTAs and DUAs ensure that both parties agree to the transfer and subsequent use of the agreed upon data/samples/materials.

If the project requires BIP, ISR officers consult with licensing officers from Applied Innovation’s Invention Transfer Group (ITG) – the group tasked with the management of the university’s intellectual property – to ensure consistency with any other university obligations.

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If human subjects or data are involved, the research project will need to be submitted to the Institutional Review Board (IRB) for approval. Without approval from the IRB, the ISR contract cannot be signed and research cannot be conducted.

At the conclusion of the research project, there may be deliverables and reports that are provided to the company.

If intellectual property is developed during the research, ITG will inform the company and inquire if it is interested in licensing the intellectual property.

For more information, contact the Industry Sponsored Research Team by visiting innovation.uci.edu/about/industry-sponsored-research
In the Ecosystem

Tech Coast Angels
Tech Coast Angels Orange County welcomed its new Executive Director, Tony Sarris, who will be based at the Cove @ UCI.

Learning Ovations
In partnership with the U.S. Department of Education, Learning Ovations has successfully equipped 114 elementary schools and 22,000 students with their research-based, ESSA strong literacy tool, the AD Professional Support System, and are continuing to scale throughout more districts across the nation.

Sustain SoCal
Sustain SoCal will host its 10th Annual Conference and Expo on April 11 at UCI Applied Innovation, which will focus on innovations and new approaches that can help current and new energy infrastructure perform more effectively and efficiently.

Docbot
Docbot recently launched an artificial intelligence service geared toward capsule endoscopy documentation with an abstract submitted by Dr. William Karnes, which has been accepted as an oral presentation at Digestive Disease Week in San Diego.

Executive Next Practices
Executive Next Practices will hold the ‘2019 Growth U Summit – New Strategies for Scale, Revenue & Brand Refresh’ on March 28 at UCI Applied Innovation, supported by SBDC @ UCI Applied Innovation.

Q&A with Chris Abernethy
Chris Abernethy is an industry contract officer within the Industry Sponsored Research team at UCI Applied Innovation. Abernethy helps UCI researchers from the School of Biological Sciences, Physical Sciences and Beckman Laser Institute submit proposals to companies and then he negotiates the resulting contract between the company and the university.

Q: What’s your favorite part about working here?
A: I like the fact that we have so many people who are involved in the process and we’re all in one building. It’s really easy for me to be able to talk to a licensing officer if I need to … I like the collaborative environment.

Q: What’s the best advice that you’ve ever received?
A: Generally, it would be advice about really loving what you do. I think it’s important, whatever you do for a living, that you enjoy it and look forward to going to work. I’ve worked for a university for a long time. That’s something I really like.

Q: Do you have any hidden talents?
A: I used to be a musician. I don’t do it anymore, but I used to play and teach music. I played woodwinds. So, saxophone, flute and clarinet.

Q: Do you have any hobbies?
A: I’d like to get back into teaching beginning music students. I don’t really have time for hobbies given that I have kids. I like music, I like writing. Those are things I’ve enjoyed doing in the past and I’ll probably do more of once my kids are grown.

Q: Where’s the coolest place you’ve ever traveled?
A: I just went to Colorado for the first time several years ago and I loved it … I didn’t think I would. In the summer, it’s a lot like Southern California but without the traffic and pollution. It’s very green and mountainous. Maybe a very distant retirement possibility!
Entrepreneurs are often unsure of how to pitch their startup or ideas to investors. My experience as both an angel investor for early-stage companies and my research on how investors make decisions has sharpened my senses on what investors may consider a good pitch. I have a few key recommendations for entrepreneurs to consider.

First and foremost, entrepreneurs need to come prepared with an understanding of the pitching process. Secondly, have different presentations available.

Now, when you think of the pitching process, you might often think of the U.S. TV show “Shark Tank.” While the investor’s questions on the show are typical, the depth and amount of the questions, as well as the timeline are radically different. For example, as opposed to a startup company being funded within 10 minutes, it often takes 30-120 days to get funded by angel investors.

As you prepare for your big moment, think of pitching to investors as a series of steps, not a one-shot process. Your goal is to get to the next step. You need to be ready to pitch on a moment’s notice, which is why you will need at least a few different types of presentations for different types of investors.

You will need what is often referred to as an “elevator pitch,” which is often less than two minutes. This pitch is only designed to pique the investor’s interest. Have this pitch with you at all times. If you get to the next step, you should have a brief presentation of five minutes or less. You should also have a brief business plan available, about five pages or fewer.

Always consider that one pitch does not fit all. Remember who you are pitching to and create separate presentations for different audiences. Remember, investors want to know the size of the market, the revenue growth, the management team, financials and exit opportunities.

Lastly, be sure to prepare a series of pitches in different time lengths, which include the elevator pitch, a five-minute pitch and a full pitch that is about 12-15 minutes long. By coming to potential investors prepared with these items, investors will feel more confident in your product.
UCI Applied Innovation is a dynamic, innovative central platform for the UCI campus, entrepreneurs, inventors, the business community and investors to collaborate and move UCI research from lab to market.