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FACULTY SPOTLIGHT

Alon Gorodetsky

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UCI Applied Innovation @ the Cove is doing our part to not only position Orange County as a globally recognized leader in scalable innovation, but to also help entrepreneurs and innovators build their own American dream. At Applied Innovation, we have provided a platform where planned meetings and accidental collisions turn into valuable connections that, I feel, will beneficially impact both the regional economy and humankind.

My vision for Applied Innovation is to identify solutions to the struggles I faced as an entrepreneur. When I was a young entrepreneur, I quickly discovered the issues numerous entrepreneurs face and the long, arduous journey that can be filled with many failures and successes. At age 24, as a bootstrap entrepreneur, I founded a computer consulting company with $250. After 17 years, I ended up selling to a multibillion-dollar firm. However, as with any startup, we encountered challenges and struggles – from hiring and firing, to expanding too quickly, to working seven days a week and missing out on family and friends – as they say: the struggle is real. But so is passion.

Applied Innovation and the Cove @ UCI were built to fuel that passion and to help provide entrepreneurs with as many resources as possible with one simple goal in mind: to give back to the community.

From more than 700 events featured at our work and presentation space known as the Cove, to access to programs like the Small Business Development Center that serves both UCI and the community, Applied Innovation provides any aspiring entrepreneur with the ability to build from their ideas.

Through our newly launched publication, I hope you will find more details through stories about these resources and successes, as well as ways to get involved at the Cove.

Take advantage of all Applied Innovation and the Cove have to offer and help make an impact on the Orange County community and beyond.

The American dream is alive and thriving at Applied Innovation and you can become a part of it. I challenge you to inspire, mentor or be the resource that propels a startup to the next level. Help us build the best damn entrepreneurial ecosystem in the world in Orange County.

By supporting Applied Innovation, you are helping others build their own dreams into realities.

– Richard Sudek, Ph.D.
Chief Innovation Officer and Executive Director

**Challenge from Richard**

Southern California is a special place for entrepreneurs and innovation. Many come here seeking their dreams and find themselves settled in Orange County, working to change lives across the world.

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I’m convinced that about half of what separates the successful entrepreneurs from the non-successful ones is pure perseverance.”

– Steve Jobs
Switzerland’s University of St. Gallen Attends Weeklong Course on Entrepreneurship / July 2018
For one week in July, 15 MBA students from Switzerland’s University of St. Gallen were at the Cove @ UCI to learn more about entrepreneurship in a program hosted by UCI’s Paul Merage School of Business.

Lunch & Learn, John Yoon / August 2018
John Yun, head of strategy and marketing for Cypher, enthusiastically talks about the importance of branding and marketing, in addition to pitching mistakes for startup companies, during UCI Applied Innovation’s August 2018 Lunch & Learn event.

Inaugural Startup Scrimmage Kicks Off at the Cove @ UCI / September 2018
UCI Applied Innovation (U spreads football season with its first Startup Scrimmage at the Cove @ UCI). The recurring event combines Monday Night Football displayed on the Cove’s Hiperwall screen with pitches from startup companies at halftime.

Girls Inc. / August 2018
Girls Inc., a nonprofit organization that encourages all girls to be “Strong, Smart and Bold” through direct service and advocacy, brought teams of young entrepreneurs who presented their own “businesses” to sell services or products during their Old Town Showdown at Chapman University.

The UK Invades the Cove @ UCI / October 2018
Life science companies from the U.K. made their way to UCI for the Greater Irvine Chamber’s 2018 Life Science Showcase event at the Cove @ UCI.

Teenagers Pitch Their Ideas at Demo Day at the Cove / October 2018
Teenage entrepreneurs from across Southern California pitched their businesses to professional investors as part of the inaugural Demo Day, hosted by K12 Ventures, at the Cove @ UCI.

How a $1,000 Personal Check Turned Into a Company with a Multibillion-Dollar Valuation / November 2018
The Angel Capital Association held a three-day conference at the Cove @ UCI, which featured a fireside chat with TAE Technologies’ CEO Michl Binderbauer and Harry Hamlin, Hollywood actor and one of the company’s earliest investors, and Richard Sudek, Applied Innovation’s chief innovation officer and executive director.

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The Cove @ UCI is host to more than 750 events per year in support of innovation, entrepreneurship, industry and the community. Stay tuned! Check out and register for upcoming events: innovation.uci.edu/events
A Little Goes a Long Way with the Student Startup Fund

When it comes to getting a startup company off the ground, finding initial funding resources can be challenging. UCI Applied Innovation’s Student Startup Fund provides micro-grants to students and alumni to help student startup companies bridge their funding gaps to further their startup journeys. Prior to seeking larger investments, startup teams might refer to friends and family to kick-start their journey. However, these investments are not always possible.

“The Student Startup Fund helps fulfill the mission and vision of UCI Applied Innovation by ensuring the key segments of the people we serve have the resources they need to successfully pursue their entrepreneurial ventures,” said Hayley Young, assistant director of the New Venture Group at Applied Innovation.

Micro-grants can be as little as $100 and range up to $1,000 and can be used for a variety of items such as prototyping materials and project supplies and are meant for immediate or short-term use. Applicants must be a current UCI student or have graduated UCI within the last 12 months and be involved with entrepreneurship programs, events or centers on campus, such as the campuswide New Venture Competition.

Bien Gutierrez, a senior biomedical engineering student, received $900 from the Student Startup Fund to attend Texas Christian University’s 2018 Values and Ventures Competition. There, he pitched his startup HUMBLE Technologies, a design for an improved syringe that increases convenience and decreases patient risk.

“Initially, we had taken it upon ourselves to pay for the competition and kind of accepted that cost as part of our training,” said Gutierrez, HUMBLE Technologies co-founder and CEO. “But, because of the Student Startup Fund, we were able to use that money for travel to this competition.” In addition to gathering more experience and networking with peers during the competition, the HUMBLE Technologies team received second place and $750 in the Elevator Pitch category.

“Everyone worked really hard for this funding,” said Gutierrez. “We believe that it was a very crucial resource for us at this stage.”

Available Technologies

**WIDEBAND DISTRIBUTED MIXERS**

A simple, novel ultra-wideband distributed complementary metal-oxide-semiconductor mixer, which incorporates on-chip distributed transmission line. A wideband distributed mixer is capable of operation over a wide range of frequencies, and can carry large amounts data up to 250 feet, which makes it attractive for military and law-enforcement use.

**HANDHELD BLOOD-FLOW IMAGING DEVICE**

The invention is a medical handheld device that carries out skin visual inspection simultaneously with blood flow measurements through integrating a Laser Speckle Imaging (LSI) system within a handheld compact dermoscope. Combining both features in one compact, cheap and easy to use device will generate accurate and elaborate functional data that will improve the accuracy and detection of diseases such as cancer.

**ULTRA-DURABLE CONCRETE WITH SELF-SENSING PROPERTIES**

Concrete is a major material component for transportation, energy, water, and building infrastructure systems. UCI researchers have developed a new class of concrete materials with extraordinarily high damage tolerance and improved properties for long-term health monitoring.

**DECENTRALIZED CHARGING PROTOCOL FOR PLUG-IN ELECTRIC VEHICLES**

Plug-in vehicles (PEVs) have drawn interest from government, automakers, and the public due to potential for reduced environmental impact. UCI researchers have developed a decentralized charging protocol for PEVs that results in improved stability in power grid demand.

**SELF-SENSING PROPERTIES**

Self-sensing properties allow for continuous monitoring of strain and temperature in concrete, and thus, can provide a new approach to the management of concrete structures.
“There are so many variables in a startup and so much information being thrown at you … to be able to put a team in a room and give them a way to think about all of that and understand what their priorities should be is just very enjoyable,” Halliwell said.

Halliwell came to Applied Innovation two years ago and has mentored UCI startups, led workshops and has an active role in the Tech Surge competition and the Wayfinder admissions process. One of the recent startups she has worked with is FirstStep Diagnostics, a UCI startup that developed a way to detect autism in early stages of human development. FirstStep won the 2018 Tech Surge track, sponsored by Applied Innovation, in the Paul Merage School of Business’ New Venture Competition and placed second in the New Venture Competition’s Life Sciences category.

As the team’s EiR, Halliwell encouraged them to focus on the value of their product rather than their competitors. Hayley Young, assistant director, New Venture Group, originally matched Halliwell with FirstStep.

“It was a combination of the promise of the technology and the strength of the team,” said Young. “I thought that would be a good complement for the skill set and experience that she brought.”

Halliwell enjoys working closely with startup companies, but she also offers advice to any startup who needs it – even if they’ve only met once or twice. Halliwell says that all startups can be flexible in their business models and can skillfully decide how their innovation diffuses into the marketplace – which involves selecting the right first customer.

“Typically, if you choose your first customer correctly, that single customer can make up the vast majority of your growth and your revenue,” Halliwell said.

Halliwell is available by appointment through email at cwhalliwell@gmail.com

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EXPERT-IN-RESIDENCE CHRIS HALLIWELL SEES BIG VALUE IN SMALL COMPANIES

Chris Halliwell knows business. Her history as a consultant for companies like IBM and Cisco prepared her for everything from electronics to biotechnology. She helps overcome innovation go-to-market strategies for both large and small companies, and has been able to leverage that experience – as well as 25 years of teaching executive education at the California Institute of Technology. She is part of UCI Applied Innovation’s Experts-in-Residence (EiR) program, a network of approximately 300 business leaders who volunteer their time to mentor UCI-affiliated startups.
A not-so long time ago, at a campus not-so-far away, Alon Gorodetsky, UCI associate professor of chemical and biomolecular engineering, developed materials that have the ability to revolutionize infrared camouflage and thermal management. Simply put, Gorodetsky has developed adaptive infrared reflecting materials, or materials that change and adapt how they reflect infrared radiation and heat for a specific purpose. These materials draw inspiration from the structures of color-changing cells and organs found in squid skin. But it wasn’t always about adaptive materials and squids. Gorodetsky originally focused his research on organic electronic materials for biosensors and solar cells, but quickly pivoted his career in 2011 to study adaptive materials inspired by the skin of cephalopods, like the common pencil squid. After walking into a talk given by Roger Hanlon, senior scientist at the Woods Hole Marine Biological Laboratory, Gorodetsky became fascinated by the ability of cephalopods, or predatory mollusks such as octopus, cuttlefish or squid, to change their color, shape and texture. The rest is not-so-distant history.

“It just blew me away, it was like seeing something out of a science fiction movie,” said Gorodetsky. “Basically I threw [out] half the work I was planning on doing and said ‘okay, let’s work on this instead.’”

HOW IT WORKS
The materials mimic a cephalopod’s complex skin structure or their camouflage ability. The skin of many cephalopods contains different color-changing components, including cells called leucophores and iridophores, as well as organs called chromatophores, which work together to help the animal change color and camouflage itself in different surrounding environments.

According to current understanding, leucophores reflect light to provide a white diffusive background. Iridophores reflect light of different wavelengths and are iridescent. Chromatophores are muscle-controlled organs that expand and contract in size – behaving like spectral filters. These cells and organs allow cephalopods to not only camouflage themselves, but also to communicate with other animals.

“Cephalopod skin is like this amazing bioelectronic display, that’s how I think about it,” said Gorodetsky. “The skin kind of has the complexity and patterning abilities similar to, let’s say, an advanced LCD screen, when it changes color, and then it can also change shape – with some limitations. It’s really a remarkable system.”

CEPH•A•LO•POD / noun
predatory mollusks such as octopus, cuttlefish or squid

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Gorodetsky and his research team began their work seven years ago by studying reflectin, a protein essential for the color-changing and light-reflecting functionality of some cephalopod skin components. The team used this protein to make thin films that change color, which eventually led them to design “invisibility stickers” that can help military personnel disguise themselves from visualization under low light conditions. These early experiments led to the team’s more advanced recent research with artificial materials.

Gorodetsky’s lab is currently focused on better understanding reflectins and using these proteins for bioelectronics, renewable energy and camouflage applications. His lab also distills core engineering principles gleaned from studying the protein-based biological systems and translates them to develop artificial thermal management materials that have new cephalopod-like functionalities. “Alon is very passionate and enthusiastic about his team and his research,” said Chengyi Xu, a materials science and engineering graduate student. “I want to see this research translate into something on the market, something we can use. Everything we do in this lab, we can see and touch it. I think it would be great to see what we are doing right now used in some application in the real world.”

WHERE IT CAN BE USED

A key aspect and one application of Gorodetsky’s adaptive infrared reflecting materials is controlling where heat goes. “For infrared, there’s the kind of deception aspect … fooling infrared cameras,” said Gorodetsky. “But there’s also a lot of places in life where adaptively controlling infrared radiation, or changing how it is transmitted or reflected by objects, would be a huge advantage.”

If the technology is integrated into textiles, the wearer could control how the clothing reflects infrared radiation to keep them warm or cool on demand. The technology can also be applied to shipping containers for perishable items, giving the shipping company the ability to control the local thermal environment in the container to prevent food from spoiling.

COMMERCIALIZATION

In 2013, Gorodetsky met with Doug Crawford, UCI Applied Innovation’s senior licensing officer, who helped Gorodetsky get started on the filing process for several patents and, subsequently, introduced Gorodetsky to Applied Innovation’s entrepreneurial resources.

“One of the things that makes working with Alon so enjoyable is that he understands the power of telling a story and how his technology relates to the everyday world,” said Crawford. “Alon makes things more accessible to any audience … by putting it in terms that make sense and how what he’s doing can potentially intersect your life or the lives of people you might know.”

Gorodetsky’s research has primarily received funding from the Defense Advanced Research Projects Agency, the Air Force Office of Scientific Research and the Advanced Research Projects Agency-Energy (ARPA-E).

In December of the same year, Gorodetsky, along with about 100 other scientists, was named by President Barack Obama as a recipient of the Presidential Early Career Award for Scientists and Engineers. The award is considered the highest honor from the United States government for science and engineering professionals who are in the early stages of their independent research careers.

Despite his technology’s many applications, Gorodetsky’s laboratory has primarily focused on clothing or personal thermal management. He has previously received a joint grant with Under Armour through ARPA-E to develop wearable materials and is currently exploring extensions of this work. According to Gorodetsky’s research publication “Adaptive Infrared-Reflecting Systems Inspired by Cephalopods” featured in Science, different variants of these materials can be developed for wearable applications and can adapt themselves like squid skin.

GOALS

Within the Gorodetsky Lab are more than 15 researchers, all with diverse backgrounds that range from materials science and engineering to molecular biology. Gorodetsky aims to move his lab’s focus toward working with more biological systems to gather a different perspective.

“If you can understand the animal’s skin better, you can do more interesting things with applications,” said Gorodetsky. “So far, we’ve just studied only certain parts of the system at the molecular level, specifically the proteins found in some of the skin cells.”

The research team also plans to continue development of practical applications for energy management to configure a material focused on providing people with the ability to control their local temperature and use less energy for heating ventilation and air conditioning. “Once we get over some manufacturing hurdles, I think we could have a practical technology from an energy management perspective, something that could help people control their local temperature, which would let you use less energy for heating ventilation and air conditioning” said Gorodetsky. “It happens to be a very important global problem … that’s where technologies like the things we’re developing could be impactful and useful.”

For more information about Gorodetsky’s research and lab, visit gorodetskygroup.org.
THE GOAL IS IF SOMEONE HAS THE INTENTION OF GOING GREEN, THEN IT SHOULD BE AS SIMPLE AS PUSHING THE START BUTTON ON YOUR CAR. IT’S NOT A BIG DECISION, IT’S JUST A SMART DECISION."

Within UCI Applied Innovation’s open-spaced ecosystem, passersby might notice a tall man with a thick, dark beard proudly talking a mix of business jargon and motivational speak to his army of interns throughout the Cove’s* shared workspace. Or he might be excitedly spouting off his next big idea, drawing charts and graphs on various unsuspecting whiteboards for fellow startup teams and Cove tenants – in sandals and boardshorts, of course.

This man is Ali Sina, CEO of startup InSolar, a company that connects solar shoppers with high-quality solar panels, installers and lenders for up to 50 percent below market price. For the past 13 years, the passionate entrepreneur has had many interests, but landed specifically on renewable energy.

"With InSolar, you are getting 320 Watt LG or Sunpower panels with Enphase Microinverters, wrap-around skirt, Pegasus Mounting, monitoring, warranties … the whole nine," said Sina. "The goal is if someone has the intention of going green, then it should be as simple as pushing the start button on your car. It’s not a big decision, it’s just a small decision."

Sixty percent of solar power is produced by a small number of very large projects owned by power companies, according to a 2018 PBS news article, "The state of the U.S. solar industry: 5 questions answered." The remaining projects are primarily small-scale, like rooftop installations. California currently occupies nearly half of all U.S. solar electricity generating capacity.

Cardenas and Sina emphasize the solar industry’s lack of transparency – where customers will often incur "soft cost"-style fees, or fees associated with pre- and post-construction expenses – with most solar installation companies. These fees are often geared toward a company’s marketing and sales efforts, however InSolar does not include marketing and sales costs in their business model.

InSolar, the team aims to streamline the solar purchase procedure by helping consumers find and vet solar installers while offering complete transparency with pricing and process. Sina cites that solar prices have plummeted 70 percent since 2010, but soft costs have increased as sales and marketing account for 67 percent of the total cost of a solar installation.

Sina says soft costs are an increasing pain point in a growing market – a point that InSolar continues to address. As opposed to the standard homeowner average of a nine-year payback for solar panels, Sina cites his company decreases the payback period to three-to-four years.

“This idea was in my head for three years,” said Sina. “At some point, I just said I’m going to do it because nobody else is doing it. By eliminating those extra costs, it’s a no-brainer.”

In September 2018, InSolar applied for The Department of Energy’s American-Made Solar Prize, a $3 million prize competition designed to revitalize U.S. solar manufacturing through a series of contests and rapid development of innovative solar solutions. And, while they wait to hear from the Department of Energy, they plan to continue to grow their client base and make the company a profitable business while expanding staff.

“As an entrepreneur, if you have a fantastic idea, you’ve got to be really multifaceted, creative … you’ve got to figure things out, you’ve got to be tough skinned,” said Sina. “You’ve got to understand that it’s a very long game. Sit tight, nothing comes fast.”

For more information on InSolar, visit getinsolar.com //

THE COMPANY’S TRANSPARENCY HELPS CUSTOMERS SAVE MORE THAN 50 PERCENT

Resources Mentioned in this Story
InSolar
innovation.uci.edu/programs/wayfinder-incubator
Cove
innovation.uci.edu/the-cove

InSolar joined UCI Applied Innovation’s Wayfinder* program in September 2017 where the team has utilized the shared workspace and networking opportunities. Already up and semi-running, InSolar has two revenue streams. These include their affiliated partnerships with sales staff and their recently relaunched website.

"The website is more like a self-serve for consumers who want more information about solar," said Sergio Cardenas, InSolar chief technical officer. "We are in the early phases and, based on what we are learning about our customers, will apply our proprietary technology to our customer base."

Here are 5 facts that may surprise you about this increasingly popular source of power:

1. The sun delivers a constant flow of 173,000 terawatts of solar energy to earth. That’s more than 10,000 times the world’s total energy use.

2. The first silicon solar cell, the precursor of all solar-powered devices, was built by Bell Laboratories in 1954.

3. The space industry was an early adopter of solar technology. In the 1960s, the industry began to use solar technology to provide power aboard spacecraft.

4. In 2016, demand for solar in the U.S. was at an all-time high with more than a 23-times increase in installations since the previous eight years.

5. California’s Mojave Desert is home to Ivanpah Solar Power Facility, the world’s largest operating solar thermal energy plant.

Source: Department of Energy, 2015
LISTICLE

9 Things You Need to Know About Intellectual Property

A BEGINNERS GUIDE TO INTELLECTUAL PROPERTY AT UCI

Intellectual property (IP) refers to ideas or creative works that are protected by law through the issuing of patents, trademarks, copyrights or trade secrets. These types of legal rights can create industries, provide incentive to researchers and drive further innovation – to name just a few of the benefits – but can often be difficult to navigate for those unfamiliar with the subject. Here is a list of nine quick insights and need-to-know tips about IP, with more information available at invention.uci.edu

1. If you have an idea, contact UCI Applied Innovation.
   If you feel you have discovered a unique technology that could have a commercial value and application, contact Applied Innovation as soon as possible. If the appropriate protections are not in place before publicly disclosing your idea (presentation, publication, etc.), patent rights might be forfeited by law. It is possible to both file a patent and publicly disclose your technology, if done in an appropriate manner.

2. What is Invention Transfer?
   Invention Transfer is part of Applied Innovation and fosters alliances between UCI and outside parties interested in the university’s IP; protects UCI’s IP which are primarily patentable inventions and copyrightable software; and commercializes UCI’s IP for public benefit by licensing it to startup and existing companies.

3. What is a patent?
   A patent is a federally given property right that provides the owner of an invention the right to prevent others from making, using, selling or offering it for sale. This right expires approximately 20 years from the date the invention was filed, assuming the patent is allowed to issue.

4. What constitutes a patented invention?
   An invention is a unique and non-obvious discovery – usually an improvement upon an existing idea – that is generally categorized as a composition of matter, method of doing something (i.e., treating a disease, manufacturing a compound, etc.), product or device.

5. Who pays for the patent and how much does it cost?
   If Applied Innovation determines that an invention is both patentable and has commercial value, UCI will pay an outside patent attorney to apply for a patent on UCI’s behalf. An issued United States patent can cost as much as $25,000-$35,000 or more. Once the invention is licensed to a startup or company, Applied Innovation will seek reimbursement of these costs from that licensee.

6. Patents help the development of early-stage technologies.
   A strong, enforceable patent can be an incentive for a commercial entity to invest in and further develop university IP into commercial products. Without the patent exclusivity, a company looking to develop an early-stage technology may have a hard time recouping its costs. Therefore, a great idea created at the university runs the risk of never making it to the public.

7. How long does it take to get a patent?
   It takes on average about three years for a patent application to be allowed to issue, if at all, which may commonly include an initial rejection or challenge by the U.S. Patent and Trademark Office followed by a counter to the decision by the applicant and inventors with help from UCI’s outside patent counsel.

8. How do I benefit from disclosing an invention?
   If your invention is commercialized, any revenues from fees and royalties – minus Applied Innovation’s costs of pursuing a patent – are shared with the inventors. Under current UCI policy, inventors receive 35 percent of any revenues, the inventor’s academic department or research unit receives 15 percent, and the remainder goes to the university to support university research and education programs. Also, if an invention is licensed to a startup or existing company, the inventors may benefit from an alliance with the company, such as industry sponsored research, where the licensee funds a mutually agreed upon research project at the university.

9. You can still conduct research after your patent is licensed to a third party.
   The licenses drawn up between UCI and third parties typically ensure that inventors can continue to work on their research that the patent is based on.

If you have further questions, clarification and guidance or to find out more information on intellectual property, patents and licenses, visit invention.uci.edu

The content of this article is not legal advice nor should the information within be used as guidance.

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Qchain
Qchain is building the first blockchain-powered custom content marketplace.

Cherubim
Cherubim is a biotechnology-focused life sciences company developing novel therapeutics for diabetes, cancer and other diseases.

Cove Fund
The Cove Fund (I & II) is a family of seed-stage venture capital funds that provide startup funding for promising Orange County and Southern California ventures.

Indi
Indi is a video platform for discovery, shopping and authentic word-of-mouth awareness that makes everybody an influencer.

Jen Vision
JenVision is a biopharmaceutical company that designs innovative drug therapy for eye and skin diseases.

LeXtron, Inc.
LeXtron is a startup to make wireless networker better and more reliable. They have developed disruptive patent-protected technology that doubles the efficiency of wireless networks, allowing for transplantable grafts for high data rates and unimagined coverage.

Novoheart
Novoheart aims to revolutionize drug discovery and development of heart therapies with proprietary bioengineered cardiac heart constructs, and to further develop them into cell-based regenerative heart therapies.

RebeccaTech
RebeccaTech is areds a thermodynamic device that detects skin concerns like wrinkles and sagging through collagen regeneration.

Carolyn
Carolyn joined Applied Innovation in July 2018 and primarily works as a special assistant to the chief administrative officer and director of external relations, and also supports the director of marketing and communications. A usual work day consists of creating reports and presentations, and managing agendas. But, there’s more to Donna than working hard at Applied Innovation. We took a closer look.

What is your favorite part about working here?
I love seeing all the creative things that our team works on. The creative energy in the office is so inspiring.

What is the last book you read?
Silly enough, it was “Pete the Cat,” the one about Halloween. I read it to my seven-year-old son last night.

What is the best book you read?
I definitely would be to stay in school, I only went for two years after high school, and if there is anything I could tell myself back then, it would be to continue my education.

What is a secret hobby no one knows about?
I just started getting back into triathlons. I did one a while back and stopped after my son was born. I do swimming, biking and running. I do the smaller triathlons; swimming is around 750 meters or just a 400 meter swim.

What do you do in your free time?
I love spending time with my family. I have two sons and a daughter, and we enjoy going on adventures together. We love hiking, camping and exploring the outdoors.

What is your favorite food?
I love Thai food. It’s spicy and flavorful, and there are so many delicious options.

What is your favorite movie?
I love the Harry Potter series. The books and movies are so engaging and come to life in such a unique way.

What is your favorite season?
I love the fall. The weather is cooler, the leaves change colors, and it feels like the perfect time to relax and enjoy the outdoors.

What is your favorite way to unwind?
I like to read and listen to music. It helps me relax and think about other things.

What is your favorite memory?
One of my favorite memories was when I went on a backpacking trip in the wilderness. It was so peaceful and refreshing to be surrounded by nature.

What is your favorite sport?
I love swimming. It’s a great way to stay active and get in shape.

What is your favorite vacation destination?
I love visiting national parks. The scenery is beautiful and there are so many things to see and do.

What is your favorite travel destination?
I love visiting new places and experiencing different cultures. I’m particularly interested in visiting countries with rich histories and unique traditions.

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TIPS
How to Pitch to Investors, Part 1: Portray Passion
THREE-PART SERIES FOCUSING ON LESSONS I HAVE LEARNED ALONG THE WAY OF MY ENTREPRENEURIAL JOURNEY.

For more than 30 years, I have had the opportunity to be an entrepreneur, investor and educator. As an investor, I have screened over 1,000 entrepreneur pitches and one of the main qualities I look for in an entrepreneur is passion. An entrepreneur’s passion is contagious. It helps propel people through challenges, inspires others and can make the difference between success and failure for many entrepreneurs and startup companies.

In 2010, I helped create a research study team where we looked at the importance of passion in the investing process. In the first phase of the study, we asked 150 angel investors nationwide for their definitions and perceptions of passion. We also asked if an entrepreneur’s passion is important in their investment decision. The results were a resounding “yes, it is important” and their definitions of entrepreneurial passion could be categorized into three main classifications:

1. DISPLAYED AFFECTIVE PASSION

Includes the outward enthusiasm and excitement the entrepreneur displays when pitching to investors.

2. DISPLAYED COGNITIVE PASSION

The preparedness the entrepreneur shows and their knowledge on their particular industry. Have they put in the time and research to learn everything they can about their competitors and customers?

3. COMMITMENT PASSION

The amount of time and money the entrepreneur has invested in their passion. For this category, the entrepreneur is doing everything they can to win, such as displaying persistence and taking risks. Are they all in? Did they quit their job, mortgaged their home to start the company?

Is this all that matters? No, angel investors made it clear that the entrepreneur has to have a unique business idea. The surveyed investors made comments like: “No amount of passion can make a pig fly,” or “Passion is just one part of the equation: skill, knowledge and intelligence … also matter.”

Deep-rooted passion is intrinsic and pervasive at an emotional, behavioral and cognitive level. If you don’t feel this level of passion for your venture, you should keep looking for the opportunity that you feel deep in your gut. You will need this passion to push you through the tough times of your startup. This level of passion will exude from within, help keep you committed and prepared, and also inspire. Passion matters to investors. 

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UCI STORIES
Across Campus
SOME OF THE LATEST STORIES FROM THE UCI CAMPUS

PAUL MERAGE SCHOOL OF BUSINESS
UCI Paul Merage School of Business’s full-time MBA program has been ranked No. 29 in the world among two-year MBA programs in an inaugural Times Higher Education/Wall Street Journal analysis of master’s programs in business.

CALIT2
Nearly 250 students from four area high schools toured CALIT2 labs and met with dozens of manufacturing professionals at “Manufacturing Day 2018,” held at CALIT2. The national event encourages manufacturers to open their doors to inspire young people to explore careers in manufacturing and engineering.

HENRY SAMUELI SCHOOL OF ENGINEERING
The American Association for the Advancement of Science named Pramod Khargonekar and Carter Butts as two of seven UC Irvine faculty this year for their efforts to further science or its applications. They will receive their certificates in February at the association’s meeting in Washington, D.C.

INSTITUTE FOR CLINICAL AND TRANSLATIONAL SCIENCE
Informatics Professor Kai Zheng was elected a Fellow of the American College of Medical Informatics by his peers for his major contributions to biomedical and health informatics. Zheng directs Center for Biomedical Informatics at the UCI Institute for Clinical and Translational Science. His research draws upon human-computer interaction.

SCHOOL OF BIOLOGICAL SCIENCES
Samantha Leigh, a doctoral candidate with Ecology and Evolutionary Biology Professor Donovan P. German, developed research that identified the bonnethead shark as the first omnivorous shark species. They discovered that bonnethead sharks probably digest and benefit from seagrass.

TEXT BY: RICHARD SUDEK, PH.D / PHOTOS BY: JACQUELINE KAO
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.