

2023
2024

UNIVERSITY OF CALIFORNIA, RIVERSIDE
OFFICE OF TECHNOLOGY PARTNERSHIPS

ANNUAL REPORT

**EMPOWERING INNOVATION –
BRIDGING GAPS**



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From Lab to Plate: Meet Excalibur™

Move over, King Arthur—Excalibur™ is here! UCR's new asparagus hybrid cultivar '77-80' is making its debut in U.S. markets through a partnership with Stone Asparagus Seed. Who knew vegetables could be legendary?



A MESSAGE FROM THE VICE CHANCELLOR OF RESEARCH & ECONOMIC DEVELOPMENT

Greetings Colleagues, Friends, and Partners,

From 2023 to 2024, UC Riverside achieved extraordinary progress in research, industry collaboration, and economic impact. Through collective efforts, we continue to push innovation forward, strengthening UCR's role as a leader in economic and technological development.

A standout achievement was UCR's designation as an Innovation & Economic Prosperity (IEP) University by the Association of Public and Land-grant Universities (APLU)—a recognition of our commitment to regional economic development, entrepreneurship, and workforce engagement.

We also expanded our research infrastructure with the launch of RAISE@UCR, our first campus-wide interdisciplinary AI research institute, fostering collaboration to address global challenges. Additionally, the Nanofabrication and Electron Microscopy Facility (NEMF) was established through the merger and expansion of the Nanofabrication Facility and the Central Facility for Advanced Microscopy and Microanalysis, enhancing UCR's capabilities in materials science, sustainability, and biomedical engineering.

NEMF further strengthens UCR CalIT2, a multidisciplinary institute advancing academic and industry partnerships alongside UC Irvine and UC San Diego. This collaboration drives innovation in science and technology to tackle complex research challenges.

UCR's commitment to economic development and clean technology innovation played a key role in attracting Voltu Motor Inc. to establish its global headquarters and manufacturing facilities in Riverside. Over the past four years, CE-CERT and OTP provided vital support, assisting with regulatory navigation, CARB certification, testing access, and industry connections. Voltu's facility is expected to generate over 400 direct jobs within four years, scaling to 700 positions, 1,200 indirect jobs, and \$1.6 billion in revenue from producing 14,000 EVs in its first three years—positioning Riverside as a hub for sustainable manufacturing.

Further strengthening our innovation ecosystem, the second round of SoCal OASIS™ Internal Funding Awards allocated \$1.3 million to faculty-led projects in clean technology, sustainable agriculture, and environmental resilience. We also broke ground on SoCal OASIS™ Park, with completion expected by Summer 2026. This park, along with seed funding, advances the broader SoCal OASIS™ initiative, driving groundbreaking research and solidifying UCR's leadership in green technology.

As we build on these successes, our focus remains on expanding UCR's impact—advancing research excellence, deepening industry engagement, training the workforce of the future, and ensuring our discoveries create meaningful societal benefits.

I invite you to explore this report and celebrate the milestones that make UC Riverside a leader in research, innovation, and economic development.

Cheers!

Dr. Rodolfo H. Torres
Vice Chancellor
Research and Economic Development

MESSAGE FROM ASSOCIATE VICE CHANCELLOR TECHNOLOGY PARTNERSHIPS



Dear Partners,

As I read through the stories and metrics captured in this Annual Report for the period of fiscal year 2023 - 2024, I feel a great sense of pride and appreciation to the entire Office of Technology Partnerships and UC Riverside's teams of mentors, instructors, tech commercialization experts, support staff who have worked tirelessly in supporting more than 160 student and faculty innovators, entrepreneurs and small business owners launch and scale their business. This past year alone, and thanks to our sponsors, we delivered more than \$500,000 in direct grants and resources to our portfolio of students, faculty and community entrepreneurs, so they can conduct technical and market validation, secure new customers and build out our region's ecosystem. This investment is complemented with more than 2,000 hours of business mentorship delivered through our INNOVAR and Zero-to-Entrepreneur workshops and direct client mentoring sessions. All of these efforts are transforming UCR and our region in a destination for innovation, entrepreneurship and prosperity.

This past year, our local programs were amplified by our efforts in providing soft landing support to technology intensive-international companies. We are proud to see Seedorina, a Uruguayan startup successfully landing at ExCITE and joining forces with Professor Robert Jinkerson and Dr. Martha Orozco in winning second place for the NASA Challenge. We are also celebrating the decision by the Voltu team from Argentina to make Riverside its home. Together with our existing portfolio of companies, we are now starting to see how a cluster of "clean" and "green" companies growing in our region. This week alone we celebrated Ohmio, an intelligent transportation company from New Zealand and Australia selecting Riverside as its global international headquarters, in part because of our efforts.

The recognition of UCR by the APLU (Association of Land-Grant Universities) & as an Innovation and Prosperity campus reflects the concerted efforts from our team and extended group of collaborators and partners who in the past eight years have been working tirelessly toward building an integrated organization to support the launch and attraction and growth of innovative enterprises.

Sincerely,

A handwritten signature in black ink, appearing to read 'ROchoa', written in a cursive style.

Dr. Rosibel Ochoa
Associate Vice Chancellor
Office of Technology Partnerships



Ohmio's Grand Opening in Riverside, CA. Left to Right: Mohammed Hikmet, Executive Chairman of Ohmio; Dr. Rosibel Ochoa, Associate Vice Chancellor of Technology Partnerships; Brian Suh, Senior Executive Director of Technology Partnerships; and Dean Zabrieszach, Chief Executive Officer of Ohmio

WORKING WITH THE OFFICE OF TECHNOLOGY PARTNERSHIPS

At UC Riverside's Office of Technology Partnerships, our mission is to foster economic development in Inland Southern California by building a dynamic entrepreneurial ecosystem. We connect the university, industry, and community to provide fast, accessible, and tailored business support. Our efforts focus on facilitating the development, funding, commercialization, validation, and incubation of life-changing innovations from local entrepreneurs, benefiting both society and the regional economy.

WHAT WE PROVIDE

Business Development Support & Mentorship for Entrepreneurs

EPIC (Entrepreneurial Proof of Concept & Innovation Center) provides faculty, staff, students, and local innovators valuable with the resources they need to start & build their companies. EPIC is a path-to-market platform that provides access to mentorship, training, incubator facilities, and access to capital.

Technology Commercialization

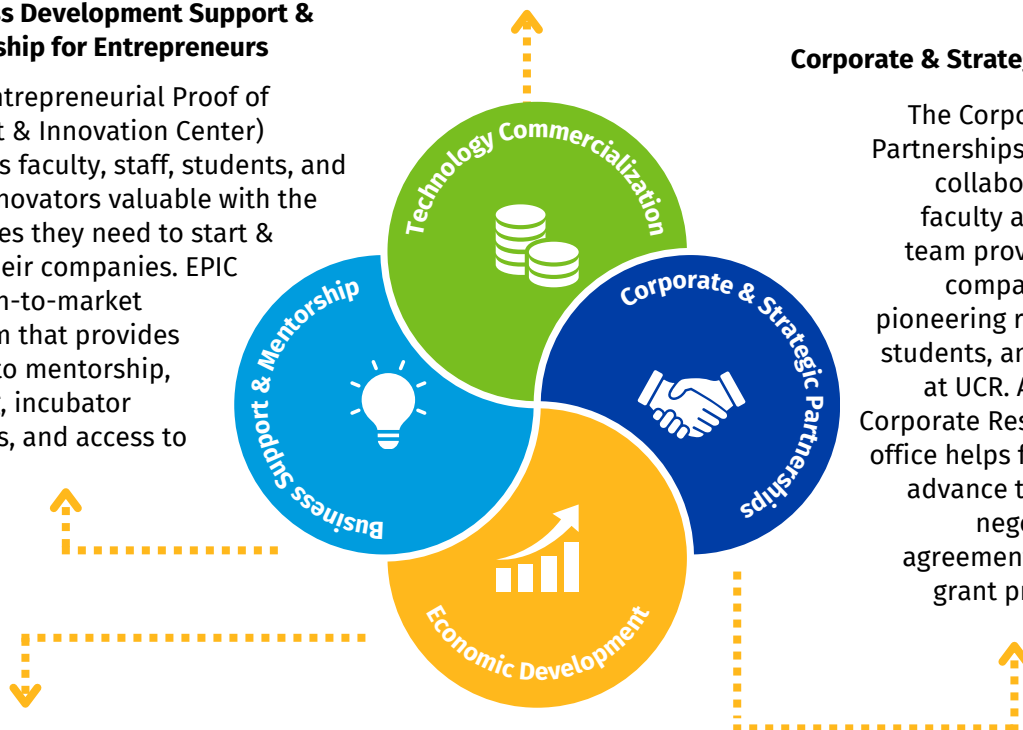
The Technology Commercialization team protects and helps commercialize cutting edge research developed at UCR. From developing an IP strategy, and filing disclosures, to licensing technologies, the TC team provides faculty, students, and staff full-service support in protecting and commercializing their UCR intellectual property.

Corporate & Strategic Partnerships

The Corporate & Strategic Partnerships team facilitates collaborations between faculty and industry. The team provides specialized company access to the pioneering research, faculty, students, and infrastructure at UCR. Additionally, The Corporate Research Contracts office helps faculty members advance their research by negotiating industry agreements and providing grant proposal support.

Economic Development

The Office of Technology Partnerships drives regional economic growth by empowering startups, small businesses, and industry partners with the tools to innovate and scale. Through programs like Build to Scale and the Inland SoCal Accelerate Hub, we help bolster job creation, attract investment, and position Inland Southern California as a hub for cutting-edge innovation.

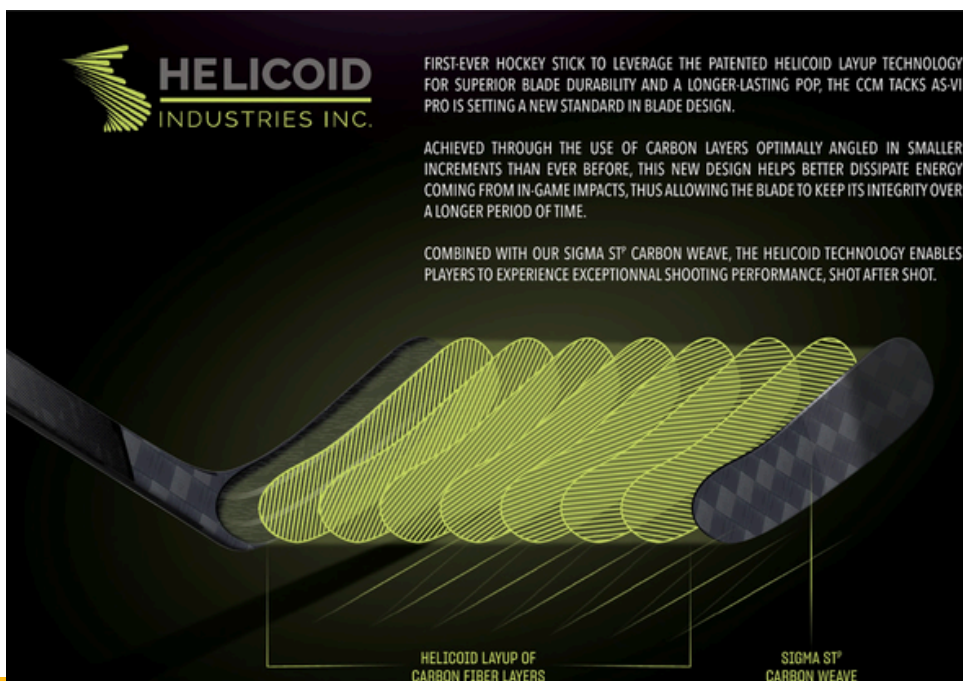


TECHNOLOGY COMMERCIALIZATION: ACCELERATING INNOVATION AND INDUSTRY IMPACT

In 2024, the Technology Commercialization team focused on strategic efforts to increase invention disclosures, manage patent expenses, enhance faculty engagement, and monitor licensee performance. The year was marked by numerous achievements in licensing, commercialization, and global outreach, highlighting UC Riverside's leadership in innovation and technology transfer.

Fiscal Year 2024 Highlights

- 1 Remote Epigenetics, Inc.:** Executed an exclusive license agreement for Dr. Anandasankar Ray's (Professor of Molecular Cell & Systems Biology) volatile histone deacetylase (HDAC) inhibitors. These innovative compounds are designed for agriculture to enhance plant growth and for healthcare applications, including cancer therapies and potential neurodegeneration prevention.
- 2 UCR 'DaisySL' Mandarin:** Licensed exclusively to Nu Leaf IP Pty Ltd for commercialization in Australia and New Zealand. The license includes sublicensing to nurseries and growers, creating a robust supply chain to bring this unique mandarin to Asian markets.
- 3 Internal & External Engagement:** Presented educational and informational seminars on IP and technology commercialization at 10 events throughout the year for both internal and external audiences, including a local Riverside County STEM Solutions Camp, UIDP, CIOPORA, prospective international partners, UC IP and legal personnel, and new UCR faculty. Activities such as this allow OTP to share our expertise and demonstrate the successes resulting from the protection and translation of UCR research from lab to market.
- 4 Helicoid Partnership With CCM Hockey:** Helicoid Industries, a UCR spinout, partnered with CCM Hockey to integrate its patented Helicoid® technology into new ice hockey sticks, delivering unmatched durability and performance for both amateur and professional players.





The Green Motion Avocado Summit offered an in-depth exploration of UCR’s advanced avocado research, including presentations and field tours showcasing Tier 3 advanced selection plantings

The Green Motion Avocado Summit marked a significant milestone in UCR’s avocado research and commercialization efforts. Held over three days across Irvine, Riverside, and Ventura County, this international gathering brought together over 35 avocado stakeholders, including breeders and growers across 12 countries and 6 representatives from Eurosemillas.

This summit was the culmination of a multi-year sponsored research agreement (SRA) between UCR and Eurosemillas, which paved the way for the global release of the Luna UCR™ avocado (‘BL516’) and exclusively licensed to Eurosemillas worldwide in 2023. The goal was to build a global network for testing and evaluating UCR’s most promising avocado selections, accelerating their path to commercialization.

Highlights of the summit included tours of the avocado plantings at UCR and South Coast Research and Extension Center, technical presentations from UCR avocado scion breeders, Mary Lu Arpaia, and rootstock breeder, Patricia Manosalva about the status of UCR’s avocado breeding programs and most advanced selections, and UCR campus leadership, Vice Chancellor Rodolfo Torres and Interim Dean of College of Natural and Agricultural Sciences Peter Atkinson, who provided a broader view on UCR’s various research expertise today and where the university is moving towards in marker assisted breeding, agriculture technology, and precision agriculture.

Fiscal Year 2024 Metrics					
144	76	19	15%	\$343K	10
UCR Inventors Served	Invention Disclosures Received	Patents Issued	UCR Portfolio Licensed	in POC Funding Awarded to Faculty	Licensing Agreements Executed

INTELLECTUAL PROPERTY MANAGEMENT

Proof of Concept (POC) Grants: Driving Innovation from Lab to Market

The UCR Proof of Concept (POC) / Eurosemillas Technology Acceleration Program (ETAP) continues to play a pivotal role in transforming cutting-edge research into viable commercial ventures. In 2023-2024, two calls for proposals were issued, resulting in seven faculty-led projects being awarded a total of \$343,400 in grant funding.

These projects spanned diverse fields such as drug delivery, environmental sustainability, and generative AI. Examples include:



Adler Dillman, Professor of Parasitology & Nematologist

(\$42,000) – Developed a novel nematode insecticidal protein for pest management applications, offering a sustainable and eco-friendly solution to protect crops from damaging pests.



Adam Godzik, Professor of Biomedical Sciences

(\$60,000) – Pioneered the use of generative artificial intelligence to discover efficient polyethylene terephthalate (PET) plastic-degrading enzymes, addressing the global plastic waste crisis with potential environmental benefits.



Jernej Murn, Associate Professor of Biochemistry

(\$34,000) – Created innovative technology to extend the viability of human organs, potentially revolutionizing organ transplantation and improving patient survival rates.



Caroline McGowan, Health Sciences Assistant Clinical Professor; LACE Co-Director / David Lo, Distinguished Professor of Biomedical Sciences; Senior Associate Dean, Research

(\$77,400) – Discovered a potential treatment for asthma caused by bacterial toxins, which differs from allergen-induced asthma. This therapy could provide targeted relief for those affected by environmental toxin exposure.



Samantha Ying, Associate Professor of Soil Biogeochemistry / Will Grover, Associate Professor of Department of Bioengineering

(\$35,000) – Designed a low-cost, easy-to-use tap water sampling device aimed at enhancing water equity by providing underserved communities with a reliable tool to monitor water quality.

Since its inception in 2013, the POC program has consistently delivered high-impact results, supporting 68 faculty projects and generating a 5.7x return on the initial \$2.43M investment, attracting a total of \$13.9M in investments on SBIR/STTR and follow on research funding.

DRIVING RESEARCH TRANSLATION THROUGH STRATEGIC INDUSTRY PARTNERSHIPS

The Corporate & Strategic Partnerships (CSP) and Corporate Research Contracts (CRC) teams at UCR play an important role in supporting faculty and students by facilitating research partnerships with corporate sponsors. This year, our team successfully secured over 300 agreements with 93 partners, bringing in more than \$6 million in corporate sponsored research funding. These partnerships reflect UCR’s commitment to advancing research and innovation in collaboration with the private sector.

Our proposal activity was equally strong, with 86 submissions valued at \$13 million. Moving forward, UCR’s research initiatives aim to increase our corporate partnerships through faculty engagement, interactive presentations, and targeted outreach strategies.

Fiscal Year 2024 Highlights

- 1 Hosted University Industry Engagement Series:** OTP hosted industry speakers from Microsoft Research, NASA, and the Invasive Species Corporation in a series of industry talks to provide UCR faculty with the chance to connect and engage with corporate entities looking to collaborate and establish a workforce pipeline, resulting in 78 attendees.
- 2 Expanded Partnerships:** CRC worked with 93 partners this year, including 14 new industry collaborators to help faculty secure corporate sponsored research. The CRC team played a pivotal role in supporting faculty, helping them secure funding through research agreements with corporate sponsors like BASF, VISA Inc., Pfizer, Corteva, Intel, and Toyota Motor Company. Additionally, four new master agreements were signed, streamlining future collaborations and strengthening corporate engagement.

Fiscal Year 2024 Metrics



CORPORATE & STRATEGIC PARTNERSHIPS & CORPORATE RESEARCH CONTRACTS



Dr. Pam Marrone delivering a compelling presentation about her journey through entrepreneurship in founding Marrone Bio & Invasive Species Corporation at the spring 2024 University-Industry Speaker Series.

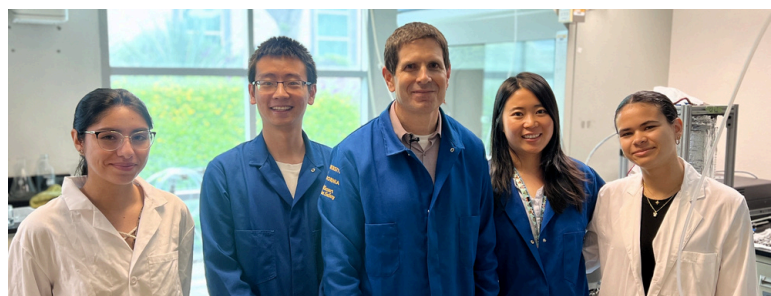
Speaker Series Spotlight: Pam Marrone of Invasive Species Corp.

The Office of Technology Partnerships (OTP) was excited to again host the University - Industry Speaker Series during the 2023-2024 academic year. The University-Speaker Series is OTP's effort to connect UCR faculty and students to real world industry efforts in product development, business models, and entrepreneurship.

National and globally renowned entomologist and biologicals scientist Dr. Pam Marrone captivated an in-person and virtual audience of faculty and graduate students highlighting her journey from academia to industry scientist and ultimately to entrepreneur in the rapidly growing fields of agricultural biological controls, biostimulants, and biofertilizers. Dr. Marrone's compelling presentation spoke to building businesses models, new products, and the financial challenges of building a new company - all crucial lessons for aspiring entrepreneurs.

Faculty Spotlight: Dr. Don Collins

UCR's Center for Environmental Research and Technology (CE-CERT) has contributed to the California Statewide Mobile Monitoring Initiative (SMMI), a groundbreaking program led by the California Air Resources Board (CARB) and funded by California Climate Investments. Through a \$750K award from Aclima, Inc., Director of CE-CERT Dr. Don Collins and his research team are leveraging their expertise to support mobile air quality monitoring efforts across the state.



Dr. Don Collins's team, from left to right: Alyssa Gomez, Minghao Han, Dr. Don Collins, Ying Zhou, and Hannah Velazquez.

As part of this initiative, Dr. Collins and his team collaborate on deploying advanced mobile monitoring technologies to collect hyperlocal data on air pollutants and greenhouse gases. This critical data will help identify pollution sources, guide targeted actions to reduce emissions, and improve public health outcomes. CE-CERT's involvement underscores its commitment to advancing environmental research and fostering equitable solutions for cleaner air in California.



Participants of the spring 2024 INNOVAR cohort, seen with Lead Instructor Jay Gilberg & Entrepreneur-in-Residences John Shearer, Steve Sharp, Isabelle Bart, Frank Rexach, Kevin Meredith, and Doug Kollmyer

INNOVAR: ADVANCING INNOVATION THROUGH CUSTOMER DISCOVERY

INNOVAR is UCR's entrepreneurial training program designed to help faculty, students, and community innovators validate their ideas and explore market opportunities. This year, we took a more focused approach by centering Fall 2023 Climate Action INNOVAR on climate resilience, adaptation, and mitigation, empowering participants to develop solutions addressing the most pressing environmental challenges in the Inland Empire.

As part of the SoCal OASIS™ Entrepreneurial Academy, participants engaged with industry experts in climate technology, transportation, agriculture, and market development, gaining valuable insights into customer discovery, business ecosystems, and commercialization strategies. Guest speakers included Michael Lim (Xtelligent - smart traffic infrastructure and autonomous transportation), Leslie Hickie (FarmSense - precision agriculture and pest monitoring), Nolan Kelly (Darcy Partners - cleantech market intelligence), Dean Zabrieszack (Ohmio - electric and autonomous vehicle technology), and Spencer Wells (Green Struxure - sustainable energy and microgrid solutions), each of whom shared expertise on market validation, industry trends, and the competitive landscape. This collaborative, hands-on approach empowered participants to refine their innovations and identify viable pathways for impact in the climate resilience space.



Spring 2024 INNOVAR student Camille Groneck, PhD Student from the "Organ Life" team presenting their pitch in the final INNOVAR class.

Fiscal Year 2024 Highlights

- 26** teams received certificates of completion from the INNOVAR program
 - 9** teams were created from UCR faculty, including 2 Proof-of-Concept Awardees (Christopher Bardeen & Jernej Murn) and 4 Climate Action Fellows (Mona Eskandari, Xi Chen, Jeoffrey George, & Dawn Nagel)
 - 4** teams were graduate students
 - 6** teams were undergraduate students
 - 7** MBA teams evaluated technologies from the UCR Technology Commercialization Portfolio

\$51,000 from **UCOP** was used for participant support to support teams under the Climate Action INNOVAR program to continue their customer discovery journey

INNOVAR CASE STUDY:







Creative Research of RNA Biology & the OrganLife Team

The OrganLife team, comprising Postdoctoral Researcher Dr. Yuan Liu, Graduate Student Shiyang He, Junior Specialist Camille Groneck, and Professors Jernej Murn and Sihem Cheloufi from UCR’s Biochemistry Department, worked under the mentorship of Dr. Scott Eliasof, assigned by Technology Partnerships.

The Murn Lab focuses on RNA-binding proteins (RBPs) and their role in regulating gene expression, cell function, and the development of diseases such as cancer and neurological disorders. Collaborating closely with the Cheloufi Lab, which specializes in stem cell RNA and chromatin research, the team aims to understand cellular plasticity and its practical implications.

During the INNOVAR Workshop, the team explored the potential commercial application of their research, specifically using RBPs to extend the shelf life of organs harvested for transplantation. By increasing organ viability, their innovation could enhance transplant success rates and reduce costs for storage and transport.

Through 18 stakeholder interviews during the customer discovery process, the team identified a strong market demand for reagent kits that prolong organ shelf life, particularly for hearts, kidneys, and livers. Several researchers expressed enthusiasm for future collaboration, validating the significance and potential impact of the OrganLife innovation.

 <p>Dr. Jernej Murn Assistant Professor</p>	 <p>Dr. Sihem Cheloufi Assistant Professor</p>	 <p>Dr. Yuan Liu Post-Doctoral Researcher</p>
 <p>Shiyang He Graduate Student</p>	 <p>Camille Groneck Junior Specialist</p>	 <p>Dr. Scott Elisaof Business Mentor</p>

Fiscal Year 2024 Metrics

17

Industry Mentors

2

Cohorts Delivered

25

Teams Trained

65

Total Participants

323

Customer Discovery Interviews Conducted

EMPOWERING INNOVATORS FOR A GREENER TOMORROW

Blackstone LaunchPad prepared a series of workshops, presentations, and activities to promote entrepreneurship across campus. The workshops focused on providing a hands-on experience to the participants. Empowering students with entrepreneurial skills equips them to devise innovative solutions for the pressing environmental challenges we face. By fostering a mindset of creativity, resilience, and problem-solving, we prepare the next generation to lead sustainable initiatives, develop green technologies, & drive impactful change.



Blackstone Campus Director Francis Reyes with students competing at the Innovation & Entrepreneurship Fair in collaboration with the UCR library

Our commitment to integrating entrepreneurship into our curriculum underscores our dedication to nurturing climate action leaders who will contribute to a healthier, more sustainable planet.

We are collaborating with other departments, student clubs, and organizations to reach out to students who don't engage in entrepreneurial activities. We facilitated activities in more neutral places, so we could reach more graduate and undergraduate students, students of color, females, and non-traditional students like transferred students, and student veterans.

- **The Innovation and Entrepreneurship Fair** was held in collaboration between Blackstone and UCR Library on April 24, 2024. It was a dynamic showcase of creativity and innovation, featuring informative tables about our programs and the wealth of resources available for student entrepreneurs. Five talented students took center stage to showcase their groundbreaking ideas, inspiring us all with their vision and passion for entrepreneurship. More than 100 students attended the fair where they were able to see the projects showcased and received information about the programs available at UCR.
- **Bending the Future with Circularity: Workshops on Circular Economy, Entrepreneurship & Innovation** was a 3-workshop series that explored the basics of circular economy, identified existing problems that circular economy principles can potentially address, proposed ways on how circular economy can solve local problems, and taught students how to pitch business ideas.

Fiscal Year 2024 Metrics

3,200
Students Engaged
in Programs

771
Students Attended
in Programs

30
Mentoring Sessions

19
Student-Led
Startups Supported

33
Sustainability
Events & Workshops

INNOVATION & ENTREPRENEURSHIP FAIR: STUDENT CREATIVITY & VISION

On April 24th, the Innovation and Entrepreneurship Fair, a collaboration between Blackstone LaunchPad and the UCR Library, showcased the exceptional talent and entrepreneurial spirit of UCR students. Five participants presented their innovative projects:

- **Samantha Vang:** Creator of custom jewelry, developed during the COVID-19 pandemic, showcasing a unique artistic vision.
- **Arash Sheikholeslami:** Developer of adjustable racing suspension components for BMWs (1992-1999), along with branded merchandise.
- **Ernesto Romero:** Designer of a biomechanical harness to support children with neurological disorders, improving their mobility and collecting vital data.
- **Liliana Lopez:** Cosplay artist specializing in detailed foam masks, such as her standout Dark Deku mask.
- **Sethya Pugal:** Innovator of a security device controlled via an Xbox controller, blending technology and accessibility.

At the conclusion of the event, Ernesto Romero earned first place for his biomechanical harness, Arash Sheikholeslami secured second place for his racing suspension components, and Sethya Pugal took third place for his security device innovation. Each participant contributed to the event's inspiring atmosphere, demonstrating the creativity and drive that define UCR's entrepreneurial community.

Student Entrepreneur Spotlight: Ernesto Romero's Mission to Redefine Mobility for Children

Ernesto Romero, an undergraduate Engineering student, is working on a biomechanical harness that can provide sufficient support and collect quantitative data from children. During his senior design project, Ernesto discovered that children with neurological disorders typically experience muscular dystrophy, coordination issues, and limping that impair their day-to-day gait and mobility. He decided to create a biomedical harness to provide much-needed support for children.

Ernesto graduated in the Spring 2024, he will pursue a master's in engineering and he will continue getting support from Blackstone LaunchPad.



Ernesto Romero proudly displaying his biomedical harness.

STARTUP AND SMALL BUSINESS SUPPORT



Cooper Proulx, CEO of HexHomes, presenting his pitch in the RivCo Fast Pitch Riverside Regional competition. HexHomes won 3rd place in the regional competition and proceeded to compete in the RivCo Fast Pitch Finals in Downtown Riverside, where they took home 1st place.

EPIC : DRIVING INNOVATION AND COMMERCIALIZATION IN 2024

In 2024, **EPIC (Entrepreneurial Proof of Concept and Innovation Center)** provided comprehensive business and market development support to UC Riverside faculty and small businesses in Inland Southern California by facilitating connections to over 70 venture capital firms across the western U.S. and maintained relationships with 12 federal agencies and 25+ sub-agencies.

EPIC's team of 19 Entrepreneurs in Residence (EIRs) and advisors provided approximately 3,546 hours of support to over 177 Active Unique Clients including 5 Proof of Concept and 9 referred by the OCIE SBDC Network. 114 of these clients are defined as "long-term," meaning they have been working with EPIC since the beginning of fiscal year 2024.

In fiscal year 2024, EPIC generated \$6,639,000 in new sales revenue (relative to \$54,354,359 in gross revenue) compared to \$30,156,000 in 2023.

Additionally, our advisors supported business model generation, customer discovery, and market development through the National Science Foundation's Innovation Corps (I-Corps). UCR is one of only seven top research universities in the Western U.S. leading the I-Corps Hub: West Region, part of a national network fostering entrepreneurship and innovation.

Fiscal Year 2024 Metrics

177

Active Unique Clients

\$17.4M

Capital Raised For
Clients

\$6.6M

New Sales Revenue
Generated

3,546

Mentoring Hours
Provided By EIRs

410

Jobs Supported

STARTUP AND SMALL BUSINESS SUPPORT

EXCITE: BUILDING A THRIVING COMMUNITY FOR INNOVATIVE TECH STARTUPS

The Riverside ExCITE Incubator, a 501(c)(3) nonprofit in Downtown Riverside, supports high-tech, high-growth startups by providing co-working space, networking, workshops, and mentorship. A collaboration between local leaders, the City and County of Riverside, and UC Riverside, ExCITE bridges campus and community resources to drive entrepreneurial success.

In 2024, ExCITE supported 16 resident companies, which secured \$4.68 million in federal SBIR grants & contracts. Since its founding in 2015, ExCITE has incubated 35 companies, seven of which have established offices in Riverside County, generating \$1.45 million in revenue & supporting 106 jobs.



In 2024, ExCITE held various community events to unite local entrepreneurs both within the ExCITE ecosystem and the surrounding areas.

This year, ExCITE co-hosted the Riverside County Innovation Month Regional Pitch Competition, where resident company Seedorina USA LLC won first place.

Educational seminars, office hours on funding, AI marketing, and HR resources were offered to startups and small businesses across Inland Southern California, as well as community gatherings to encourage collaboration within the local entrepreneurial ecosystem.

Riverside Fast Pitch Competition Regional 1st place winner, Seedorina, represented by Nicolas Franco, proudly displays their 1st place check.



Seedorina, ExCITE's newest resident, joined in February after winning the UCR EPIC Eurosemillas Challenge, securing \$40,000 and incubation support. With SBDC mentorship, it identified 15 customer prospects for beta testing its precision seed-planting robot. Also partnering with UCR startup NoLux, a NASA Deep Space Food Challenge finalist, the team placed second, winning \$250,000 for its artificial photosynthesis-based food production system.

FUELING LIFE SCIENCES INNOVATION: EXPANDING STARTUPS, SECURING FUNDING, & STRENGTHENING PARTNERSHIPS

The Life Sciences Incubator provides a fully equipped lab for community and faculty startups to advance their technologies and demonstrate commercial potential. As the first in the region, it supports local startups in Riverside, San Bernardino, and Imperial Counties with engaged backing from OTP and local government.

In 2024, the incubator housed 11 companies, securing \$875,000 in grants and supporting 38 jobs. Three new startups—Water Illumination, Remote Epigenetics, and Sensorygen—joined to further their development.

This year, we hosted tours for potential partners like UCR/COH CARE Partnership, SoCal Microbiome, and CalIT2 while Lunch & Learn sessions fostered industry and UC Riverside collaborations.

Looking ahead, we aim to expand funding opportunities through programs like the Opportunity Gateway and strengthen ties across academia, industry, and local partners through co-sponsored events that drive innovation and growth.

Water Illumination, founded by Professor Haizhou Liu from the Chemical and Environmental Engineering department, joined our Life Sciences Incubator community in January 2024. The company aims to tackle the persistent problem of PFAS contamination in water through an innovative approach that was further developed within the Incubator. Their groundbreaking technology harnesses shortwave ultraviolet light to generate reactive molecules that effectively break down these "forever chemicals" without producing harmful byproducts. This promising method could revolutionize large-scale water treatment systems by providing an affordable and efficient solution for PFAS destruction.

The Water Illumination team from left to right: Matthew Luy, Giovanni Nunez and Tom Guda



With the support of their EPIC SBDC mentor Steve Sharp, Water Illumination's potential was recognized when they were awarded a \$275,000 SBIR Phase I Grant from the National Science Foundation, further propelling their efforts to combat water pollution.

MORE HIGHLIGHTS FROM OUR EPIC COMPANIES

Edge Sound Research closed a \$1.9 million seed round led by Potential Capital, with support from Techstars, Elevate Ventures, GC&H Ventures, Kern Venture Group, and strategic angels, bringing total funding to \$2.7 million. An EPIC SBDC client since May 2020, Edge develops tactile-audio technology for immersive experiences. Its ResonX Core transducer, used in premium seating at live sporting events, integrates with venue sound systems to create master-grade audio vibrations that align with the seat's material. This technology allows users to feel sound, from the bounce of a basketball to concert-level immersion.



CEO Valterri Salomaki and Co-Founder/CTO Ethan Castro of Edge Sound Research

Exigent AI has made strong progress bringing their deep expertise in AI and machine learning to the semiconductor industry. The team has secured a two-pilot program with leading companies and non-dilutive funding to make key employee hires and enable their growth via Phase 1 NSF SBIR (\$275k) and CHIPS SBIR Phase I funding (\$290k). 2025 is expected to be a breakthrough year as they are set to move into Phase II of CHIPS (\$1.9M expected) in response to the commercialization momentum they have already achieved. UCR is proud to support their journey and contribute to the US re-establishing itself as a global leader in semiconductor industry.

Icarus RT achieved key milestones in 2024, generating \$490,000 in first-year sales from projects like a Chula Vista Aquatic Center and a net-zero housing pilot with the California Energy Commission. Its 'Cold Solar' system launched, expanding into India and Australia. The company secured a \$50,000 national Solar Prize, \$760,000 in grants, and a U.S. patent for its hybrid photovoltaic-thermal system, with two provisional patents and international trademarks in progress.

The Opportunity to Advance Sustainability, Innovation, and Social Inclusion (SoCal OASIS™) is a public-private partnership led by UC Riverside to drive regional economic development through solutions-driven applied research, innovation, entrepreneurship, and workforce development around sustainability, clean technology, and social inclusion.

This year we expanded our assistance and training to small businesses in the community, launched the SoCal OASIS™ Challenge Pitch Competition, and began international recruitment for cutting edge sustainable companies to locate here in our region. The mission of these SoCal OASIS™ projects are to transform Inland Southern California into a thriving innovation ecosystem powered by sustainable, high-tech industries that employ our local population and uplift our economic prosperity.

Fiscal Year 2023-2024 Highlights

- 1** Secured initial funding to finalize Phase I development and completed design phase of the SoCal OASIS™ Park
- 2** Educated 155 individuals through the Zero-to-Entrepreneur program, empowering them with technical skills and entrepreneurial expertise
- 3** Hosted the 2023 SoCal OASIS™ Challenge Pitch Competition, awarding \$110,000 to innovative startups
- 4** Attracted interest from international companies, reinforcing the region's potential as a hub for clean tech innovation



Inland Southern California winners shown with judges at SoCal OASIS™ Pitch Challenge Finals

2023 SoCal OASIS™ PITCH CHALLENGE: \$100K IN NON-DILUTIVE FUNDING FOR INLAND SoCal STARTUPS

The 2023 SoCal OASIS™ Challenge Pitch Competition marked a significant milestone for the initiative, bringing together the region's most promising entrepreneurs to compete for \$110,000 in non-dilutive funding to advance product development and commercialization. The competition attracted 36 applicants from community and university innovators, with 16 businesses selected for intensive bootcamps and personalized mentorship from EPIC SBDC Entrepreneurs-in-Residence. After weeks of preparation, six finalists—including four women-led and two men-led startups—pitched their refined business ideas to a panel of angel and venture capital investors.

Sponsored by The James Irvine Foundation and US Bank, the Pitch Finals offered these startups a unique opportunity to secure non-dilutive, venture-free funding, enabling them to grow without giving away equity. Indrio Technologies received \$20,000, while From the Land was awarded \$40,000 along with an additional \$5,000 People's Choice Award.

SoCal OASIS™ INITIATIVE



The 2023 SoCal OASIS™ Pitch Finals, sponsored by the James Irvine Foundation and US Bank, drew over 180 attendees to the UC Riverside campus and included a guest list including local policymakers, corporate executives, banks, entrepreneurs, and more.

One awardee successfully connected with the Inland Empire Tech Coast Angels, highlighting the competition's ability to open doors to key resources and networks for local startups.

This competition, designed as part of the SoCal OASIS™ Pitch Challenge, provided invaluable training on pitching—a crucial step for entrepreneurs on their journey toward fundraising. Effective pitching equips entrepreneurs with the skills to attract potential investors, secure critical support, and propel their ventures toward success.

The six finalists presented innovative solutions in sustainability, technology, and housing, demonstrating the diverse entrepreneurial talent in the region:

- **A&G Electronics (Riverside):** Focused on circular economy strategies to minimize waste and preserve resources.
- **Cash Electronic Designs (CEDI) (Rialto):** Developed patented Magnetic Energy Converters to revolutionize energy recovery in electric motors.
- **From the Land (Yucaipa):** Utilizes modern and ancient technologies to establish sustainable circular food systems, increasing food security for all. (Grand Prize Winner)
- **Indrio Technologies (Riverside):** Pioneers laser-based spectroscopy for mass-market applications. (Winner)
- **Laundry to Landscaping (Moreno Valley):** Addresses water scarcity through sustainable irrigation solutions. (Winner)
- **Necessary Homes (Palm Springs):** Builds net-zero eco-homes to combat California's housing shortage with a focus on U.S.-sourced, non-toxic materials.

The winners—From the Land, Indrio Technologies, and Laundry to Landscaping—each received grant funding to accelerate their ventures and further their mission-driven impact.



Andrea Cuellar of Laundry to Landscaping presenting her pitch onstage.

CREATING A CLEAN TECH INNOVATION HUB IN INLAND SOUTHERN CALIFORNIA

The SoCal OASIS™ Park will be the first major piece of physical infrastructure within the SoCal OASIS™ hub. The park is specifically designed to connect researchers, students, industry, startups, and the community. By cultivating trust and partnership, the park will be a catalyst for groundbreaking innovative solutions. Positioned prominently on University Avenue, it will serve as an inclusive and accessible gateway to UCR, centrally located in the City of Riverside Innovation District.

2024 Achievements

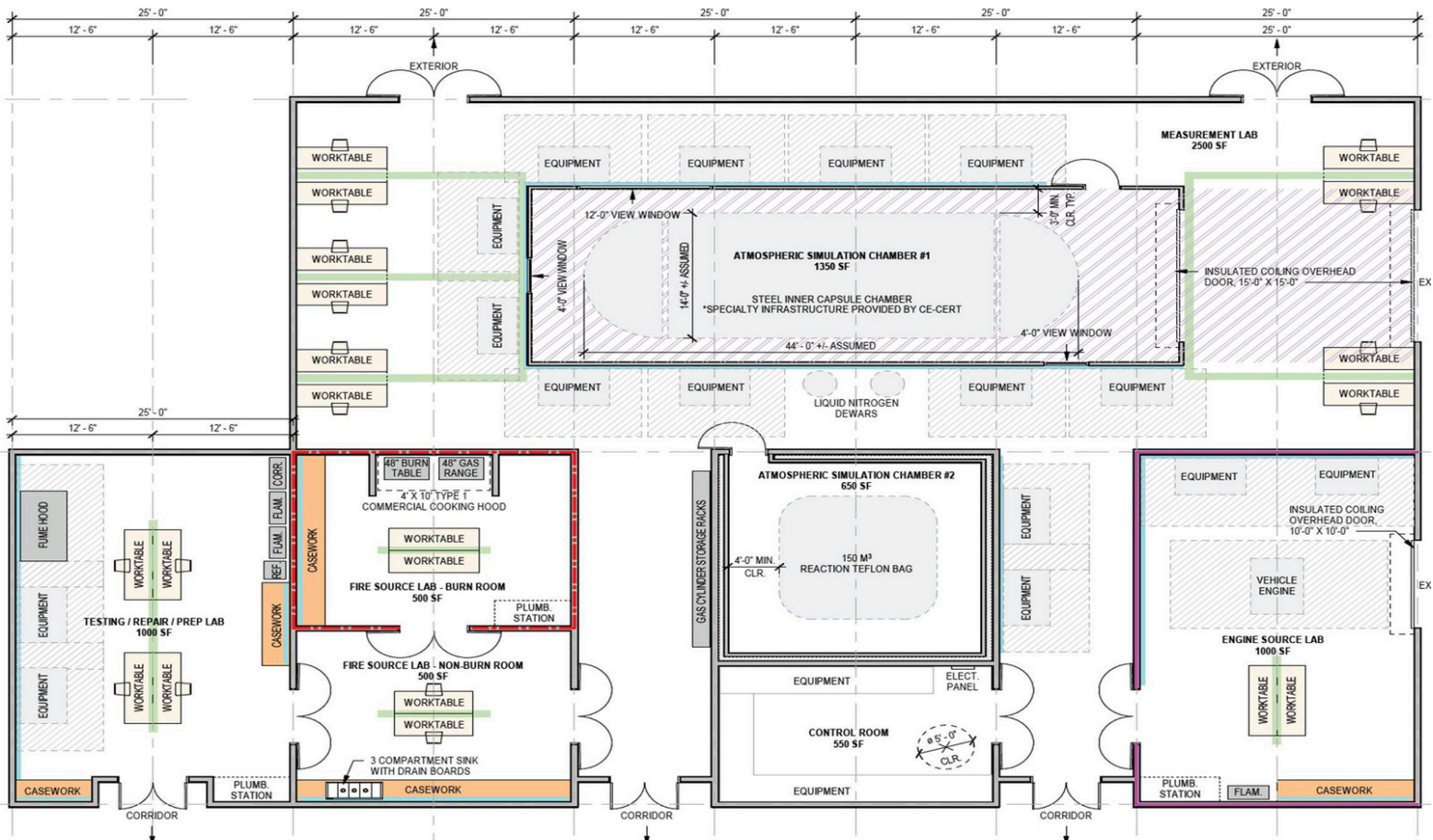
- Completed the design-build phase with input from stakeholders
- Secured initial funding to finalize Phase I development

Facilities and Space:

- Phase I will open in 2026, featuring a 45,000 sq. ft. facility with a \$68M investment
- The site spans over 8 acres, with potential for 300,000–400,000 sq. ft. of building space

Resources and Amenities:

- Training facilities, company workspaces, makerspaces, and labs for atmospheric and mobility research



EMPOWERING INNOVATION AND SCALEUPS

The SoCal OASIS™ Build to Scale (B2S) program is designed to accelerate the growth of promising ventures in Inland Southern California. By integrating technical support, mentorship, and a network of test beds, B2S provides a vital platform for scaling innovative ideas into viable businesses. This year, the program demonstrated its transformative potential by supporting a diverse range of companies and securing significant funding for the region's ventures.

2024 Highlights & Achievements

- 1

Expanded Company Support: The B2S program evaluated 30 companies and provided individualized assistance to 15 of them. Through this support, participants completed 19 critical milestones, ranging from prototype development to securing initial customers. These milestones demonstrate how the program accelerates innovation and commercialization.
- 2

Mentorship and Resources: B2S facilitated over 1,000 hours of mentorship by domain-specific experts, offering technical and business insights to guide companies through complex challenges. Additionally, a comprehensive resource database was developed, totaling 240 resources and 45 funding opportunities, creating a centralized hub for entrepreneurs to access critical tools.
- 3

Secured Regional Support: The program leveraged over \$2.4M in external funding, underscoring its ability to attract investment for high-potential ventures. Six collaborations between faculty and industry were established, further enhancing the ecosystem of innovation.

Fiscal Year 2024 Metrics

8

Startup Advocate Organizations

1,000+

Hours of Mentorship Provided by
Entrepreneurs-in-Residence

\$2.4M+

Leveraged Support Raised

30

Companies Evaluated

15

Companies Assisted

1

Company Relocated to Inland
Southern California Region



Rito Sur, CEO of Indrio Technologies, presenting his pitch at the 2023 SoCal OASIS™ Pitch Finals. Sur was a winner of the competition.

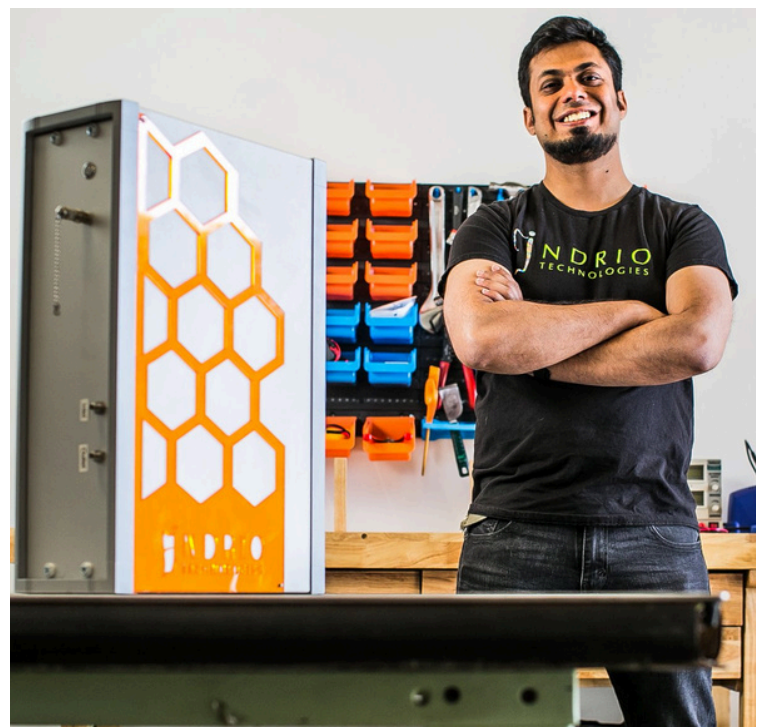
SUCCESS STORY: INDRIO TECHNOLOGIES

Indrio Technologies stands out as a prime example of the impact the B2S program can have on emerging ventures. This company specializes in high-temporal resolution laser technology for sensing emissions in ambient air, a critical innovation in environmental monitoring.

Indrio joined the B2S program and quickly leveraged its resources, participating in the Zero-to-Entrepreneur training and winning the OASIS Pitch Challenge. With the support of the program, the company attended the Climate Action Conference and gained valuable insights from technical mentors. These activities helped refine their business strategy and solidify their market approach.

Key Milestones Achieved

- **Secured a Manufacturing Facility:** Indrio established its manufacturing plant in Riverside, aligning with the program's mission to boost the region's economic growth.
- **Initial Orders and Market Entry:** The company successfully secured initial purchase orders, marking a significant step in its journey toward commercialization.
- **Funding and Visibility:** Their innovative technology garnered widespread attention and positioned Indrio as a key player in the clean tech sector.



CLIMATE RESILIENCE THROUGH ENTREPRENEURIAL INNOVATION

The SoCal OASIS™ Entrepreneurial Academy is a comprehensive program designed to support innovators in addressing climate resilience, adaptation, and mitigation for vulnerable communities in Inland Southern California. Funded by a \$1 million University of California grant, the academy leverages UCR's entrepreneurial ecosystem to provide education, mentorship, commercialization support, and funding opportunities. Through a combination of structured workshops, fellowships, and industry engagement, the academy empowers early-stage entrepreneurs and researchers to develop and deploy solutions for pressing climate challenges.

Key Initiatives for 2024

- 1 Early Career Faculty Climate Entrepreneurial Fellowships:** Provides funding and mentorship to early-career faculty developing climate resilience technologies with commercialization potential.
- 2 INNOVAR Entrepreneurial Education Workshops:** A seven-week entrepreneurial bootcamp guiding faculty, students, and community members through customer discovery and business development for climate-focused ventures.
- 3 Undergraduate Entrepreneurial Program:** Equips UCR students with entrepreneurial skills to develop solutions for climate adaptation through workshops, speaker series, and a pitch competition.
- 4 Climate Action Conference:** An annual event showcasing progress from SoCal OASIS™ programs, fostering dialogue on regional climate challenges, and connecting entrepreneurs with industry stakeholders.

EARLY CAREER FACULTY FELLOWS

The 2023 Early Career Faculty Climate Fellows were selected through a competitive process, each receiving \$110,000 in funding and mentorship to advance climate adaptation research. Their projects focus on critical regional challenges, including agriculture, extreme heat mitigation, and emergency response.



Dr. Jeffrey George (Botany and Plant Sciences) is engineering climate-resilient alfalfa using gene editing to improve root plasticity and water-stress tolerance, ensuring long-term agricultural sustainability in drought-prone regions.



Dr. Dawn Nigel (Botany and Plant Sciences) is researching heat tolerance in rice, California's second-largest crop, by identifying proteins that enhance resilience to extreme temperatures and exploring genetic modifications to improve yield stability.



Dr. Xi Chen (Electrical and Computer Engineering) is developing advanced phase change materials for energy-efficient cooling in buildings, aiming to reduce energy consumption by 20% and enhance climate resilience in urban environments.



Dr. Basak Guler (Electrical and Computer Engineering) is creating an AI-driven Climate Assistant that delivers real-time, multimodal early warnings for disaster-prone communities, ensuring better preparedness and response strategies.



Dr. Mona Eskandari (Mechanical Engineering and Bioengineering) is pioneering a novel lung health diagnostic that uses viscoelasticity as a biomarker, improving access to pulmonary screening and disease monitoring for vulnerable populations.



Nadereh Afsharmaneh (Bourns Inc.), Alberto Giron (Niagara Bottling Co.), Rafael Guzman (City of Riverside), and Tracy Sato (Riverside Public Utilities) discussing climate change in the inland empire with moderator Fortino Morales (UCR Office of Sustainability).

On January 30th, 2024, **the Inland SoCal OASIS™ Climate Action Conference** brought together over 150 experts, entrepreneurs, policymakers, and community members to address climate challenges in the region. The event focused on sustainability, innovation, and fostering regional collaboration to combat climate change while promoting economic development.

Event Highlights

- 1 Resources to Mitigate Climate Change:** Panels explored impactful strategies to address the most pressing climate challenges in Inland Southern California. Discussions emphasized actionable solutions for sustainable freight systems, renewable energy transitions, water resource management, and local climate policies that drive measurable outcomes. Experts also provided guidance on accessing funding and policy resources to empower regional businesses and communities to adopt climate-resilient practices.
- 2 SoCal OASIS™ Entrepreneurial Fellowship Research:** UCR faculty, including Dr. Basak Guler, Dr. Xi Chen, Dr. Mona Eskandari, Dr. Dawn Nagel, and Dr. Jeoffrey George, showcased cutting-edge research tackling energy efficiency, agricultural sustainability, and climate-related challenges.
- 3 Innovative Climate Solutions:** Entrepreneurs and experts shared approaches to integrating sustainability into innovations and business models. Gina and Richard Oliver (From the Land) presented sustainable indoor farming solutions, Emily Kroll (Necessary Homes) discussed modular housing, and Rito Sur (Indrio Technologies) showcased advanced air sensing technologies. Kevin Meredith and Jay Allis expanded on incorporating circular economy principles, providing practical examples from food systems and resource recycling.
- 3 Keynote Address:** Steve Slater (Naussler Group) delivered an inspiring keynote on leveraging entrepreneurship to drive meaningful climate action through innovation.

The 2024 Inland SoCal OASIS™ Climate Action Conference showcased how collaboration between academia, industry, and community stakeholders can drive actionable climate solutions. With a diverse lineup of speakers and panels, the conference reaffirmed UCR's leadership in fostering innovation and sustainability in Inland Southern California.

BUILDING A PIPELINE FOR SUSTAINABILITY ENTREPRENEURS

The Zero-to-Entrepreneur Program provided a 6-month UCR Extension education program, free of charge, to underserved community members. Participants gained technical skills, entrepreneurial knowledge, and access to a robust network of resources, helping them create opportunities in the sustainability sector.

Program Outcomes

- 1 Educated 155 individuals, raising awareness of career opportunities in sustainability.
- 2 Six graduates have developed viable business ideas, with one incorporation and two preliminary product launches.
- 3 Fostered long-term economic growth by equipping participants to establish and expand businesses in the Inland Empire.

SUCCESS STORY: FROM THE LAND

Gina Oliver and Richard Hutchison, farmers from Yucaipa, located in San Bernardino County, exemplify the transformative impact of the SoCal OASIS™ Initiative. After joining the Zero-to-Entrepreneur program, they refined their business idea of supporting small farmers through fabricated micro farms for vegetables and herbs. Their journey included consulting with experts and conducting customer discovery interviews.

As a result, they won the grand prize at the SoCal OASIS™ Pitch Challenge & joined the EPIC program, where they secured funding to build prototypes and acquire their first customer. This success demonstrates the synergy between SoCal OASIS™ programs & the long-term benefits they bring to the region's entrepreneurs.

Zero-to-Entrepreneur instructor Dr. Javier Narvaez-Vasquez teaching students about clonal micropropagation



REGIONAL ECONOMIC DEVELOPMENT



The inaugural partners of the Inland SoCal Accelerate Hub (I-HUB) met to discuss a strategy plan for launching the Hub. Partners include UC Riverside, Cal State San Bernardino, FedTech, Riverside County, Riverside Community College District, Latina Business Women's Association, AmPac Business Capital, Murrieta Innovation Center, and Blended Impact.

INLAND SOCAL ACCELERATE HUB: ACCELERATING REGIONAL INNOVATION & ECONOMIC DEVELOPMENT

The Inland SoCal Accelerate Hub (I-HUB) officially launched on July 22nd, 2024 with an in-person kickoff event that brought together over 30 community organizations committed to fostering innovation and economic growth in Inland Southern California. As part of this initiative, six funded partners—Cal State San Bernardino, Blended Impact, AmPac Business Capital, IE National Latina Business Women's Association, Murrieta Innovation Center, and Riverside Community College District—joined forces to provide a collaborative support system for regional entrepreneurs located across the entire eastern part of Southern California, from northeast to San Bernardino Valley and southeast to Imperial County.

Additionally, high-level executives from across the region—including Chancellor Kim Wilcox of UC Riverside, Mayor Patricia Lock Dawson of Riverside, Ben Raju of the U.S. Small Business Administration, Chris Earl of CalOSBA, US Bank and City National Bank, regional investors, and entrepreneurs—were invited to discuss opportunities for collaboration and financial support for the initiative.



The I-HUB supports entrepreneurship in Riverside County, San Bernardino County, & Imperial County.

Key Highlights for 2024

1 Addressed Regional Challenges:

- OTP hosted an in-person kickoff event with over 30 inaugural partnered organizations, gathering key leaders to discuss key areas of focus for the region, identifying four key issues - limited access to capital, lack of infrastructure, fragmented coordination among organizations, and the need to reshape the region's narrative through stronger media and communications efforts.
- The Hub established 4 working committees to tackle the 4 identified challenges, with members meeting monthly to develop actionable solutions.

REGIONAL ECONOMIC DEVELOPMENT

- 2 Established a Collaborative Entrepreneurial Pipeline:** Worked with partnered organizations to create a structured pipeline with entry points for entrepreneurs at all stages, leading to funding opportunities through programs like UCR’s Opportunity Gateway & SBIR/STTR Resource Center.
- 3 Launch of the Opportunity Gateway Program:** Introduced the Opportunity Gateway program to provide targeted mentorship & resources to help scaleup companies secure funding.
- 4 Addition of the SBIR/STTR Resource Center:** The second key initiative of the Hub involves UCR’s SBIR/STTR Resource Center, which provides guidance to companies navigating through the complex process of writing SBIR/STTR proposals.



Chris Earl, Assistant Deputy Director of CalOSBA, discussing entrepreneurship in underserved regions at the kickoff event.

In 2024, we advanced our mission by guiding startups toward funding opportunities through the Opportunity Gateway and SBIR/STTR Resource Center. These programs provided essential mentorship, investor connections, and federal funding support, equipping high-potential ventures with the resources needed to scale. Through these efforts, I-HUB has strengthened the region’s entrepreneurial ecosystem, fostering a more connected and capital-ready innovation landscape in Inland Southern California.

Fiscal Year 2024 Metrics

520

Businesses Supported

63

Programs & Events Hosted

\$10.3M

In Non-Dilutive Capital Obtained For Businesses

\$60.3M

In Loans Secured For Businesses

From left: Timothy Akers, Associate Provost for Academic Research at CSUSB, Riverside Mayor Patricia Lock Dawson, UCR Chancellor Kim Wilcox, Ben Raju of LA District US Small Business Administration, and Chancellor Wolde-Ab Isaac of Riverside Community College District at the discussion along with regional executives and industry leaders.



OPPORTUNITY GATEWAY: PREPARING VENTURES FOR CAPITAL AND GROWTH

The Opportunity Gateway is the signature program of the Inland SoCal Accelerate Hub, designed to help high-potential ventures secure capital, form strategic partnerships, and advance toward commercialization. Through EPIC SBDC, the program provides hands-on mentorship, investor engagement, and milestone-driven guidance to support startups in scaling their businesses. The Investor Strategic Advisory Board, comprised of venture capitalists, angel investors, and corporate executives, helps evaluate and guide participating ventures, while a newly forming Corporate Partner Board of Advisors connects startups to strategic alliances, licensing, and acquisition opportunities.

2024 Opportunity Gateway Ventures

Five ventures were selected for the inaugural Opportunity Gateway cohort, each working toward commercialization and investment readiness:

A. Cirgo, a UCR startup, is repurposing end-of-life solar panels into structural building materials, with pilot studies underway to validate economic and environmental impact.

B. Seedorina developed an agricultural robotics solution that automates precision seed planting, reducing seed, water, and fertilizer use. The company is focused on securing capital to scale production and expand its market.

C. Indrio Technologies created a patented laser-based chemical sensor for emissions monitoring, with \$1.4M in revenue and \$4.75M in funding. The company is developing hydrogen sensors and expanding applications across multiple industries.

D. GattaCo is revolutionizing at-home blood plasma collection with its A-PON™ Plasma Separator. With a \$15M fundraising goal, it aims to scale operations and launch its next-generation product.

E. 4th State Energies, formerly SiLi-ion, developed a silicon-based battery material that outperforms graphite anodes. Now expanding into drone, automotive, and material manufacturing, it secured a \$200,000 SBIR grant from the U.S. Department of Energy to refine its low-temperature plasma technology.

Each venture follows a structured Statement of Work outlining core aims, milestones, and timelines for 2025. Milestones are reviewed semi-annually and adjusted as needed based on product development, partnerships, funding secured, and revenue generated. The program's long-term impact will be measured through technology validation, sales growth, federal and private funding, and job creation.



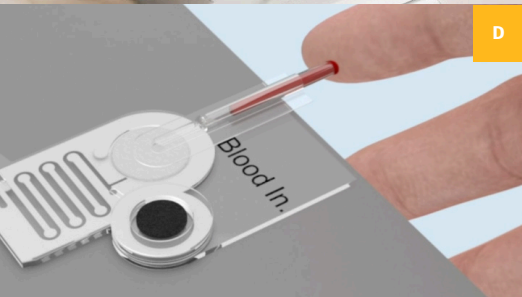
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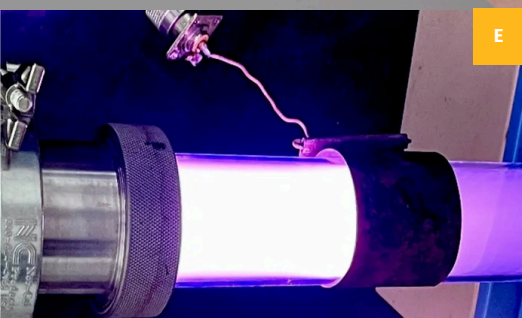
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C



D



E

REGIONAL ECONOMIC DEVELOPMENT

SBIR/STTR RESOURCE CENTER

The UCR SBIR/STTR Resource Center plays a critical role in helping small businesses and researchers secure federal funding to advance technological innovation. The Center provides expert mentorship, hands-on proposal support, and strategic guidance on research design, team development, commercialization, and proposal submission. Over the past fiscal year, the Center facilitated 48 SBIR/STTR proposals, leading to 13 awards totaling \$16 million in funding. Through workshops, one-on-one consultations, and in-depth proposal reviews, the Resource Center enhances the competitiveness of applicants, increasing their likelihood of success in securing non-dilutive funding.

As a key pillar of the SoCal Inland Accelerate Hub, the Resource Center strengthens the regional innovation ecosystem by connecting entrepreneurs, researchers, and industry leaders with essential funding opportunities. Beyond supporting individual applicants, the Center extends its impact by collaborating with university departments and community partners to deliver educational workshops and outreach initiatives, ensuring more startups and small businesses across Inland Southern California can access and leverage SBIR/STTR funding to drive economic growth and technological advancement.

StarNav CEO Joshua Morales, VP Austin Jack and FPGA engineer John Jeric Macatula at the 2024 Institute of Navigation GNSS+ Conference.



StarNav LLC was awarded \$4.0 million in grants in 2024, including \$2.0 million from the NSF Phase II SBIR and \$2.0 million from the DoD (Air Force Research Labs). The company, already a recipient of multiple SBIR and contract awards, has developed technology that converts ambient radio signals (e.g., cellular signals) into positioning data as a GPS backup. StarNav also provides consulting in sensor fusion, navigation systems, and signal processing. An EPIC SBDC client since November 2020, StarNav has secured \$7.2 million in grants with EPIC's support, along with assistance in business and market development.

Rejoule Inc. secured \$6.3 million from the U.S. Department of Energy (DOE) to scale its EV battery diagnostics technology, designed to detect system-level hazards and defects at collection points. In total, Rejoule has received \$16.9 million from the DOE. The company develops advanced diagnostics tools and a battery management system (BMS) to optimize lithium-ion battery performance, supporting second-life applications for EV batteries.



Laura Levine, PMP from the U.S. Department of Energy (DOE) and Christopher J. Perez from U.S. House of Representatives visited CEO Steven Chung and CFO Zora Chung at the Rejoule facility to learn how more about Rejoule's revolutionary BattScan500V.



JIM LLANO

Associate Director of Corporate & Strategic Partnerships

OTP bid farewell to our friend and colleague, Jim Llano, after nine years of dedicated service at UCR as the Associate Director of Corporate & Strategic Partnerships. His outstanding work ethic, team spirit, and commitment to excellence have made a significant impact on the Office of Technology Partnerships. We extend our sincere gratitude for his contributions and wish him a fulfilling and joyful retirement.



AILEEN LUIB

Assistant Director of Special Programs & Outreach

Aileen Luib brings 8 years of experience in marketing, branding, and media production to her role at the Office of Technology Partnerships. As the Assistant Director of Special Programs & Outreach, she focuses on enhancing the visibility of OTP's initiatives and fostering connections between Inland Southern California tech entrepreneurs and UCR's network of resources. Her work supports the region's growing entrepreneurial ecosystem by creating opportunities for mentorship, funding, and program engagement.



LUKE KANNIKE

Senior Corporate Engagement Officer

Luke joined OTP from industry with over 15 years of experience in corporate engagement and strategic partnerships. He focuses on developing and managing collaborative research opportunities, building industry partnerships, marketing UCR intellectual property for commercialization, and creating strategic plans that connect UCR's resources with industry stakeholders.



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