



Examples of UC Commercialization, Innovation and Startup Activities



- Since 2006 [UC Berkeley has cultivated more than 1,300 founders and 1,225 companies that have raised \\$36.3 billion in capital.](#)
- UC Berkeley has helped create the world's most valuable companies such as **Apple, Softbank, Intel, Gap, eBay, Tesla** and many more.
- Since the mid 1990's UC Berkeley counts **1649 active inventions, 774 active patents and 814 active foreign patents**, all managed by the [Office of Intellectual Property and Industry Alliances.](#)
- UC Berkeley's campus portal [BEGIN](#) is a gateway and roadmap for the **Big Ideas Contest, CITRIS Foundry, NSF I-Corps, LAUNCH, SkyDeck and Startup @ Berkeley Law**, as well as resources to reach scale via angels, government grants, incubators and venture capital.
- In May 2021, UC Berkeley launched the [Bakar BioEngineuity Hub](#), the campus's new home for innovation and entrepreneurship in the biosciences to address humanities greatest challenges.

UC DAVIS

- [InnovationAccess](#) stewards intellectual property created and owned by UC Davis, **manages around 1,500 inventions and over 500 active U.S. patents.**
- Since its inception in 2013, [Venture Catalyst](#) has **supported the formation of over 100 startups** based on foundational intellectual property from UC Davis which raised more than \$1.5 billion.
- Proof of Concept programs have made 49 awards and resulted in **16 startups and \$33 million in follow-on funding.**
- Examples of startups include: [Sage Therapeutics](#) (therapeutics for **brain disorders**), [Evolve Biosystems](#) (probiotics for **infant gut health**), [Tule Technologies](#) (crop irrigation sensors), [Synapsense](#) (**data center monitoring**; acquired by Panduit), [Delix Therapeutics](#) (non-hallucinogenic psychedelic compounds for **psychiatric and neurological conditions**), [Arcadia Biosciences](#) (**crop traits**; public company), [Origin Materials](#) (plastics from biomass).

UCI

- [UCI Beall Applied Innovation](#) (BAI) plays a critical role in helping to **accelerate discoveries, and providing support to entrepreneurs.** The **Enterprise Collaborations Group** helps to **connect companies with UCI innovators** to foster collaborations between the campus and industry partners.
- The **Research Translation Group** (RTG) provides assistance to university faculty, physicians and researchers in navigating the translation of their discoveries. **60 startups have been created through the RTG over the last six years. UCI manages 622 active patents.**
- The **Proof of Product grants program**, which accelerates the development of technologies, has awarded **\$3.7M since 2016 to campus researchers and laboratories.**
- The **New Ventures Group** supports incubator startups, which have raised **\$25 million in equity and more than \$8 million in grants since 2018.**
- In 2020, **BAI's Small Business Development Center's (SBDC)** clients generated over **\$18 million in economic impact** and supported more than 1,000 jobs.
- The Cove @ UCI is an epicenter for innovation and entrepreneurship in Orange County. Built to create opportunities for connection, sharing and growth the Cove provides the UCI campus and

surrounding community a hub with access to resources, tools, exposure and like-minded individuals.

- **Investments in and liquidity exits of UCI-affiliated startups to date: \$26.5 billion.** Of the investments, 59% stayed in Southern California and \$2.6 billion (18 percent) fueled economic activity in Orange County.

UCLA

- [UCLA's Technology Development Group](#) is the campus-wide gateway to innovation, research and entrepreneurship.
- The public-private partnership [Scale Aerospace Ventures](#) attracted **\$1.4 million in private matching funds**, which, together with an Economic Development Administration 2020 Venture Challenge award, is creating an aerospace innovation hub in Los Angeles.
- [Mona Jarrahi](#), a professor of electrical engineering in the UCLA Electrical and Computer Engineering Department was named **one of the five 2020 winners of the [Catalyzing Pediatric Innovation Grant](#)** from the West Coast Consortium for Technology & Innovation in Pediatrics—a Food and Drug Administration-funded pediatric MedTech accelerator—for her [innovation in terahertz technology](#).
- **Start-up:** Sri Kosuri, an assistant professor at UCLA College of Chemistry and Biochemistry, started [Octant](#) in 2017. Octant works to **apply synthetic biology applications to transform drug discovery efforts** to find treatments for complex diseases.

UNIVERSITY OF CALIFORNIA MERCED

- UC Merced's [Office of Technology, Innovation, and Industry Relations](#) supports faculty and student interests in entrepreneurship.
- The **UC Merced I-Corps program** connects faculty/student teams and customers to **identify scalable and repeatable sales or business models**, iterate their adoption process, determine the feasibility of starting a company, licensing intellectual property, pivoting or stopping entirely.
- The **Blackstone Launchpad project** offers an inspiring **speaker series** and provides means of connecting students interested in entrepreneurship with resources and mentors.
- The **Venture Lab** is a **physical and virtual site for connecting students, alumni, and faculty entrepreneurs** with resources including patent attorneys, workshops on various topics, and experts in technology transfer.
- A new **Oxygen Fund**, sponsored by the UC Merced Foundation, provides **summer funding to students and recent alumni** needing support to bring their inventions to market.
- **Start-ups:** Winston Cone Optics, a **solar energy** company, and Biosynthesis, Inc., a company looking at optimizing a diagnostic kit that will **make certain types of testing affordable** and developing treatments targeting proteins in biofilm.

UCR

- Since 2016, [UCR's Office of Technology Partnerships](#) (OTP) has leveraged over **\$17 million** in Federal, State, and private funding to launch over **13 programs and initiatives that support innovation and entrepreneurship** through [training](#), [mentorship](#), [access to capital](#), and [incubators](#).
- The [EPIC Small Business Development Center](#), [INNOVAR \(UCR NSF I-Corps Site\)](#) and Launchpad @ UCR provide support to students, faculty and the community with the process of starting new businesses and going through the commercialization process. OTP has reached more than **6,000 students through Launchpad @ UCR and trained 200 teams** through INNOVAR which average 40 percent female and 53 percent underrepresented minority participation over both programs.
- Awarded over **\$1.8M in [Proof-of-Concept funds](#) for 54 projects** to advance commercialization of faculty technologies. Companies supported by OTP programs raised over **\$48 million in investment capital, \$13 million in SBIR funding and grants, and supported over 400 jobs.**

- Three companies have graduated from the Riverside ExCITE incubator and are currently raising **\$3.2 million in funding** for the commercialization process.
- **Startups:** [Sensorygen, a life science start-up founded by UC Riverside professor Dr. Anandasankar Ray recently closed a \\$1.5 million equity funding raise.](#)

UC San Diego

- The campus has a more than **\$1 billion research portfolio** and is [the number four public institution for startup creation and number seven for patents issued.](#)
- At UC San Diego, entrepreneurship thrives with **nearly a dozen incubator resource centers** on campus. In 2020, there were **497 invention disclosures** recorded on campus.
- In the last ten years at UC San Diego, there have been **168 licensed startups**, 24 in 2020 alone, that have launched because of a keen focus on innovation and entrepreneurship.
- There are **37,000 jobs attributable to UC San Diego-related companies**, and more than 1,000 companies around the world use or have used technology we created, providing hundreds of jobs and fueling acquisitions by tech giants like Cisco and Apple.
- In collaboration with campus partners, UCSD's [Office of Innovation and Commercialization \(OIC\)](#) provides **resources to encourage and support an innovative community** comprising students, faculty, staff, alumni, and community advocates.

UC SANTA BARBARA

- UCSB's intellectual property (IP) portfolio averages over **600 technologies**, over half of which benefited from federal funding. An [average of 4-6 startups form annually from UCSB, creating jobs in the Santa Barbara area and across California.](#)
- [The Wilcox New Venture Incubator \("The Garage"\)](#) serves startup businesses at UCSB with **mentorship and educational programs.** [The CNSI Incubator](#) provides one of the few wet-lab incubator spaces on the Central Coast of California.
- The [Office of Technology & Industry Alliances Startup Support Program](#) serves as the technology transfer office for UCSB and offers a **support program to connect startups with investors, incubators/accelerators, service providers and mentors.**
- [The Technology Management Program](#) provides **entrepreneurship education programs** and hosts the New Venture Competition. The [Bren Eco-Entrepreneurship Program \(Eco-E\)](#) offers **impact-oriented entrepreneurship education programs** to graduate students, to support innovation. Nearly 60% of Eco-E startup founders are women.
- **Startups:** [Apeel Biosciences](#) (**edible polymers to reduce food waste**), [Soraa](#) (high quality, energy-efficient **LED lighting**), [Lastline](#) (**cybersecurity**) and [CytomX Therapeutics](#) (**oncology**).



- UC Santa Cruz has over **30 innovation and entrepreneurship offerings** campus-wide including [UCSC Startup Academy](#), [The Everett Program for Technology and Social Change](#), [Tech4Good Lab](#), [Creative EDG2](#) and [Hacking4Oceans](#).
- Some of these programs led to UCSC applying to join the **Public Interest Technology University Network (PIT-UN) network**; [UC Santa Cruz was one of 15 institutions that joined the network in February 2020.](#)
- In April of 2021, [UC Santa Cruz launched](#) the [Innovation & Business Engagement Hub](#) to serve as the **connection point for the campus' innovation ecosystem** and facilitate relationships around university innovation and intellectual property.
- In 2000, the UCSC genome bioinformatics group made history by releasing the first working draft of **the human genome sequence** on the web. Later that year, they launched the [UC Santa Cruz Genome Browser](#) - the most widely-used genomics platform worldwide.
- **Startups:** **Genetic sequencing company** [Oxford Nanopore Technologies](#) (David Deamer and Mark Akeson); Kelly Harkins founded [ClaretBio](#) in 2017, which builds tools to analyze and prepare **next generation genetic sequencing (NGS) libraries**; William Dunbar (Baskin School

of Engineering) and co-founder Dan Heller, a UCSC graduate, founded [Ontera](#), a leader in **silicon-based nanopore diagnostics**, to support sustainable agriculture.



- By partnering with industry, UCSF's [Office of Innovation Ventures](#) helps bring innovations to market. UCSF is the birthplace of biotech, nurturing **innovators that have gone on to start Genentech, Chiron (now Novartis)** and other industry giants. **To date, UCSF has generated more than 200 startups.**
- UCSF recently formalized a new strategic collaboration with [Autobahn Labs](#), a “virtual incubator” focused on **drug discovery and development**, to help move scientific discoveries with therapeutic potential quickly to market.
- **Startups:** [Soteria](#), an immuno-oncology company focused on developing switchable bispecific T-cell engagers to **treat patients with solid tumor cancers**, was founded in 2018 by Professor Jim Wells, co-founders Zach Hill, Alex Martinko from Wells Lab with [UCSF Entrepreneurship Center](#).



BERKELEY LAB

- Managed by the UC on behalf of the DOE Office of Science, Berkeley Lab supports a robust commercialization ecosystem that is directly responsible for **numerous innovations and scientific discoveries with significant commercial value.**
- As of 2020, **more than 60 startups** have been founded based on Berkeley Lab technologies, and **more than 80 Berkeley Lab technologies**, protected by **more than 250 patents and patent applications**, are being commercialized by the Lab's licensees.
- [Cyclotron Road](#) is a fellowship program that **supports entrepreneurial scientists** and **focuses on applied technologies** that are too risky to attract private-sector investment. Cyclotron Road projects-like [Opus-12](#), [Fervo Energy](#), [Cuberg](#) have raised more than **\$150 million in funding** and **created more than 135 jobs over the past five years.**
- **Startups and inventions:** [Gamma Reality Inc.](#) (improves radiation detection); [Aeroseal](#) (addresses **leaky ducts** in HVAC systems); [an infant-warming device](#) (developed by Berkeley Lab & UC Berkeley) **helps prevent hypothermia** in newborns; [novel jet fuel](#) that utilizes lignocellulosic biomass, a **renewable carbon source**; and a [new cuff-based technology that monitors endothelial function](#) to aid prevention and treatment of **heart disease.**

UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources

- The **Verde Innovation Network for Entrepreneurship (VINE)** is UC ANR's innovation & entrepreneurship network and program, focused on **translating and commercializing research** into solving the world's pressing agriculture, climate, health and equity challenges. Launched in 2017, the [VINE](#) networked California's array of programs, incubators, and accelerators statewide, both public and private sector, **accelerating the challenging path to market for novel food and agriculture technology startups.**