The goal of CSU Ventures is to accelerate the translation of cutting edge research into meaningful products and services that can enrich people’s lives locally, nationally and globally. We engage in corporate partnerships and cultivate networks to support the thriving culture of innovation at Colorado State University, in Northern Colorado, and across the Front Range.

**PATENT HIGHLIGHTS**

In 2019, 47 patents (US and International) were issued to CSU inventors and five potato varieties (PVP) were recognized. The 30 U.S. patents were issued for inventions created by 36 faculty/staff and 32 post-doctoral researchers/graduate students from four CSU Colleges. Please join us in congratulating those 36 faculty and staff:

**College of Agricultural Sciences:** Patents – Lawrence Goodridge, Jessica Prenni, Mathew Wallenstein; Potato Varieties – Robert Davidson, Samuel Essah, Fahrettin Goktepe, Caroline Gray, Andrew Houser, David Holm, Sastry Jayanty, Cecil Stushnoff.

**College of Veterinary Medicine and Biomedical Sciences:** Steve Dow, Amanda Guth, Robert Handa, Tod Hansen, Timothy Holt, Susan Knudson, Terry Nett, Ian Orme, Daniel Regan, Richard Slayden, Douglas Thamm

**College of Natural Sciences:** Travis Bailey (2), Eugene Chen (2), Robert Cohen, Yun-Seok Choi, Jeffrey Field, Benjamin Reynolds, Melissa Reynolds, Jian-Bo Zhu

**Walter Scott, Jr., College of Engineering:** Todd Bandhauer (2), Randy Bartels, Lakshmi Prasad Dasi, David Dandy, Casey Farnell, Susan James (4), Salman Khetani, Kevin Lear, Ketul Popat (2), David Prawel (2), Ken Reardon, Thomas Sale (3), John Williams, Azer Yalin

**COMMERCIALIZATION HIGHLIGHTS**

The Rapid InterLibrary Loan (Rapid ILL) service developed by CSU Libraries staff was acquired by ExLibris, joining forces to provide libraries worldwide a unique solution for more efficient peer-to-peer sharing and document delivery.

**Growcentia**, founded on technology developed by Drs. Matt Wallenstein (Soil & Crop Sciences) and Colin Bell, released its second product, Mammoth Biocontrol – an all-natural herbal insecticide spray, safe for indoor and outdoor cultivation.

CSU startup **Cypris** was awarded a slot in the prominent startup accelerator Cyclotron Road. The Cypris team attending the Cyclotron Road accelerator includes two recently graduated PhDs and co-founders, Drs. Ryan Pearson and Mathew Ryan, students of Dr. Garret Miyake (co-founder, Chemistry).

**Access Sensor Technologies**, was awarded a slot in the Tool Foundry startup accelerator. The AST lead team attending the Tool Foundry accelerator includes three CSU undergraduate students from the College of Business and the College of Natural Sciences. AST was founded by Drs. Chuck Henry (Chemistry), and John Volckens (Mechanical Engineering).

**VetDC** announced a development and commercialization partnership with Elanco to further develop their product Tanovea-CA1, the first FDA conditionally approved canine lymphoma treatment (Chief Medical Officer - Douglas Thamm, Clinical Sciences).

**2019 BY THE NUMBERS**

- **$473K** Proof of Concept Funding
- **127** Inventions Disclosed*
- **47** Issued Patents
- **$3.82M** License Revenue
- **52** License Agreements*
- **6** Startup Companies

*NEW RECORD
LAUNCHPAD is a program that supports startup companies by working with founders from idea through formation and launch of the company. In 2019, LAUNCHPAD awarded $473K in grant funding under the State of Colorado Advanced Industries Proof-of-Concept Program to faculty in five departments (Chemistry, Civil & Environmental Engineering, Clinical Sciences, Mechanical Engineering, Soil & Crop Sciences). Many of these faculty also participated in the Research to Market Accelerator (R2M).

LAUNCHPAD conducted the third and assisted with the fourth cohorts of the 2019 R2M workshops. The third cohort consisted of promising technologies from Colorado State University - Garret Miyake (Chemistry), Jay Ham (Soil and Crop Sciences), Susan James (Mechanical Engineering), Ron Tjalkens (Toxicology), Tiezhen Tong (Civil and Environmental Engineering), Chris Ackerson (Chemistry), Tiana Magee (Biomedical Sciences); and Colorado School of Mines – Susanta Sarkar (Physics). The forth cohort was conducted by CU Boulder Venture Partners, and included three CSU startups – CitSci.org (Greg Newman, Russell Scarpino, Sarah Newman, NREL), Razix (Andre Dozier, Civil and Environmental Engineering), and EcoMetrix (Keith Paulstian, NREL).

LAUNCHPAD is a program that supports startup companies by working with founders from idea through formation and launch of the company. In 2019, LAUNCHPAD awarded $473K in grant funding under the State of Colorado Advanced Industries Proof-of-Concept Program to faculty in five departments (Chemistry, Civil & Environmental Engineering, Clinical Sciences, Mechanical Engineering, Soil & Crop Sciences). Many of these faculty also participated in the Research to Market Accelerator (R2M).

LAUNCHPAD conducted the third and assisted with the fourth cohorts of the 2019 R2M workshops. The third cohort consisted of promising technologies from Colorado State University - Garret Miyake (Chemistry), Jay Ham (Soil and Crop Sciences), Susan James (Mechanical Engineering), Ron Tjalkens (Toxicology), Tiezhen Tong (Civil and Environmental Engineering), Chris Ackerson (Chemistry), Tiana Magee (Biomedical Sciences); and Colorado School of Mines – Susanta Sarkar (Physics). The forth cohort was conducted by CU Boulder Venture Partners, and included three CSU startups – CitSci.org (Greg Newman, Russell Scarpino, Sarah Newman, NREL), Razix (Andre Dozier, Civil and Environmental Engineering), and EcoMetrix (Keith Paulstian, NREL).

The Award for Innovative Excellence is presented to CSU researchers whose innovations have been transferred to industry and are exhibiting strong potential for commercial success. Congratulations to the team of Victoria “Tori” Anderson, Scott Haley, Philip Westra, and Michael Ostlie for their amazing contributions to the CoAXium Wheat Production System.

The CoAXium System combines stewardship, elite varieties and a superior ACCase-inhibiting herbicide with a patented non-GMO herbicide tolerance trait to bring wheat growers worldwide the most innovative and comprehensive technology for producing wheat.

“Several years ago, the wheat producers of Colorado approached Colorado State University looking for a new solution to combat the grassy weed problems faced by Colorado wheat growers each year. Not only did it have to work better than what was commercially available, but it also had to be cost-effective. CoAXium™ Wheat Production System will deliver on that vision.”

– Mark Linnebur, President, CWRF Board of Directors

The State of Innovation Speaker Series brings leading innovators in academia, industry, and government together to educate on cutting-edge science topics, spark research ideas, and generate collaborations.

**2019 Regenerative Medicine speakers:**
- Debra Mathews, PhD, MA (Johns Hopkins)
- Anthony Atala, MD (Wake Forrest)
- Shenda Baker, PhD (Synedgen, Synspira)

The year-long CSU Ventures Ambassador Program provides career development opportunities for graduate students and post-doctoral researchers that include experiences identifying innovations, developing non-technical communication skills, and networking with startups and the Northern Colorado entrepreneurial community. Since the inception of the Ambassador Program in 2012, there have been 37 Ambassadors from 20 departments across all eight CSU Colleges.

A premiere event that inspires and enriches the entrepreneurial community of CSU and Northern Colorado.

Faculty, staff, and students, as well as alumni, business professionals, and entrepreneurs have the opportunity to engage with researchers and local emerging companies in and around our community.

In 2019, we had 106 research posters showcasing innovation across all 8 Colleges and 31 Departments; 30 CSU-affiliated start-up companies, and over 450 attendees! Plus, we awarded over $46,000 in cash to the presenters.