

Knowledge Fund Investment

Funded by

Nevada Governor's Office of ECONOMIC DEVELOPMENT

University of Nevada, Reno



Programs Supported: Serving Nevada's Economic Growth

Nevada Center for Applied Research

Providing industry, entrepreneurs and agencies access to the University's labs, equipment and expertise by:

- Offering access to more than 55 leading-edge labs and services.
- Offering affordable co-working and laboratory space on campus.
- Facilitating large-scale research initiatives involving coalitions of public and private stakeholders.
- Supporting incubation of early-stage businesses, predominantly biotech, with resources and mentoring.
- Supporting **workforce development** and experiential learning for students.

Innevation Center

A hub of entrepreneurialism and innovation in downtown Reno, facilitating access to mentorship, investors, makerspace, interns and more. Supported in part by the Knowledge Fund and open to the community through a membership model.

Nevada Autonomous

Developing robotics, artificial intelligence and autonomous systems, with current research that includes:

- Drone and unmanned aerial operations, driverless cars, advanced manufacturing systems, underground and underwater robots.
- Management of Nevada's official, FAA-designated
 Unmanned Aircraft Systems (UAS) Test Site
 Service.
- **Nevada Gold/Barrick partnership** testing underground robotics applications for exploration and safety.
- Development of large high-bay area to conduct University or industry drone tests with accuracy of position and orientation.

Knowledge Fund-supported efforts – Further RESULTS since 2013

- \$150.7M total grants and donations received
 - Includes **\$140.8M** in sponsored-research contracts (grants and fee-for-service)
- > 17 spin-off companies
- > 23 companies relocating to Nevada
- > 9 faculty hired full-time by Knowledge Fund
- > 10 faculty receiving some portion of support
- 88 student interns engaged with projects (hired by affiliated companies)
- > 12 student employees (hired by University)
- Patents filed by University none, work in progress
- 73 patents filed by companies incubated in NCAR
- > 725 Jobs created
- Commercialization revenue to University none, work in progress
- \$\$201.5 Venture Capital raised by affiliated companies
- Established testing safety procedures that have been validated through field trials since 2015.

Intelligent Mobility

Developing solutions for safe, clean and efficient transportation. This statewide effort coordinated through NCAR involves:

- **Public and private stakeholders** including the Regional Transportation Commissions of Washoe County and Southern Nevada, cities of Reno and Henderson, Nevada Department of Transportation, The National Judicial College and Fraunhofer IVI, as well as businesses such as Switch, Proterra, Dell EMC and Velodyne Lidar.
- **Researchers with expertise** in synchronized transportation, advanced autonomous systems, computer sciences and robotics, geography, social psychology and judicial studies.
- "Living Laboratory" real-world test sites in Northern and Southern Nevada, with "lidar-enhanced" roads able to communicate data to connected vehicles.

Water Innovation Campus

Addressing water problems in Nevada through collaborations with the cities of Reno and Sparks, Truckee Meadows Water Authority, Western Regional Water Commission and Nevada Department of Transportation. Research includes water reclamation and reuse applications, stormwater management, industrial water and waste management and more.

Sierra Accelerator for Growth and Entrepreneurship (SAGE)

SAGE is designed to put Nevada's qualified small, technology-based businesses on the path to earn federal grant funding through the competitive SBIR and STTR programs.

Making a Difference for Nevada

"The resources we found through NCAR, be it their industrial space or the Biosciences Entrepreneurial Lab or even just the office space we use there, it's all been very helpful in allowing us to grow our business and develop our product and our intellectual property."

– Joe Hill, founder, Adaract

"One of the most important things for us is that **[NCAR has] fee-for-service for very expensive equipment that companies like ours cannot afford** at this point, but we can use per-hour. It's a **great environment to do your experiments and develop your company**."

- Solange Massa, chief executive officer, Ecoatoms

"NCAR has helped with our research and development capabilities tremendously. We're able to pursue a lot of new and highly innovative ideas, especially in molecular biology, which requires a lot of equipment and also resources in terms of ordering chemical in time and reagents in time; NCAR is fully capable of supporting us in doing that."

– Tian Yu, CSO and VP of product development, Truckee Applied Genomics

"Being affiliated with UNR/NCAR provides MACOMA Environmental Technologies positive exposure. We received from NCAR office space, access to conference rooms for business and great connections. We are receiving ongoing support from the Executive Director Carlos Cardillo.

- Ezekiel Martín, founder and chief executive officer, MACOMA Environmental Technologies

"The University is focused on facilitating world-class research and discovery. We appreciate **NCAR's contributions to the growth of our knowledge-based economy** here in Nevada. NCAR has been very helpful in our efforts to attract great companies to the region."

- Mike Kazmierski, CEO, Economic Development Authority of Western Nevada (EDAWN)

For more information

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