Knowledge Fund Investment

Funded by Nevada Governor's Office of ECONOMIC DEVELOPMENT

5
Programs Supported

$9,441,000
Total Direct Knowledge Fund Funding

46
Research Faculty Hired / Retained / Recruited as a result

11
Students Hired

$3,807,077
Knowledge Fund $ Supported Faculty & Staff

$17.4 million
External Research Grants Awarded to Faculty

4
Start-Up/Spin-Out Organizations

1
Patent Filed

DRI has leveraged Knowledge Funds to launch new research areas that include investments in the health of Nevada's citizens, solving problems in Nevada's agricultural industry, and identifying the technology needs of water managers and matching them with companies who can solve those challenges.

Programs Supported: Serving Nevada's Economic Growth

Healthy NV Project™

The Knowledge Fund allowed DRI to launch the Healthy Nevada Project, a population health study that is examining genetic and environmental risks for certain diseases among Nevadans. Participants receive free genetic testing to determine risks for cardiovascular disease, respiratory disease, diabetes, liver disease and addiction. With more than 50,000 Nevadans enrolled, the Healthy Nevada Project is one of the largest population health studies in the country and one of the first population health studies in the country to provide results to participants, allowing them to discuss with their physician ways that they can lower their risks of developing certain diseases. The Healthy Nevada Project is now operated by the Renown Institute for Health Innovation (Renown IHI), a Nevada LLC. Renown IHI research project funding increased by $5 million in the last year and allowed DRI and Renown IHI to pursue $3 million in funding from the National Institutes of Health. Together, DRI and Renown IHI have received more than $40 million in combined research funding as a result of the Knowledge Fund investment.

Tū Biomics

The Knowledge Fund provided support for the development of an organic antifungal chemical to solve white rot, a major problem for garlic growers in Nevada and California. DRI developed an antifungal chemical to address white rot. After spinning out of the DRI organization in 2020, Tu Biomics has continued to advance the development of its microbial chemistry solutions for agricultural applications. Tu Biomics has identified its first product candidate and is working to prepare it for commercialization. The company continues to work with DRI as it builds a product discovery and a state-of-the-art bioinformatics platform. As 2021 begins, Tu Biomics is negotiating a commercial partnership and is targeting two to three additional product discoveries. Tu Biomics received nearly $1 million in seed funding from venture investors and industry partners and is planning a multi-million dollar fund-raise.

RESEARCH WORKS FOR NEVADA

DRI Desert Research Institute

UNLV

University of Nevada, Reno

NSHE

Learn more at researchworksfornevada.org

DRI's successful WaterStart program was launched in 2013 to identify the technology needs of water managers and matches them with companies who can solve those challenges. WaterStart successfully spun out of DRI in July 2020. WaterStart members include the Southern Nevada Water Authority (SNWA), Truckee Meadows Water Authority (TMWA), Virgin Valley Water District, Metropolitan Water District in California, and members in the United Kingdom and Australia.

Making a Difference for Nevada

28
Businesses Created, Relocated, or Expanded in Nevada due to KF

78
Number of Jobs Created/Retained

Healthy Nevada Project Impacts:

- **Sharing information not discovered in clinical visits**

Initial results from 30,644 Healthy Nevada Project study participants showed that 90% of carriers of the CDC Tier 1 genetic conditions were not previously identified in a clinical setting. The authors conclude that population genetic screening would identify at-risk carriers not identified during routine medical care.

- **How wildfire impacts asthma in Nevadans**

Researchers in the Health Nevada Project found that for Nevadans who suffer from asthma, wildfire smoke is more hazardous than other types of air pollution. The study found a 6.1 increase in medical visits for asthma on days when wildfire pollution was present when compared with days of similar pollution levels that came from non-wildfire sources. The study included scientists from DRI, the Renown Institute for Health Innovation, and the Washoe County Health District (WCHD).

PROMETHEUS Impacts: Using drones to better understand wildfire

An early recipient of Knowledge Funds, DRI scientists focused on the development of new unmanned aerial vehicle technologies to improve wildfire research and management. Today, DRI scientists are partnering with the U.S. Forest Service and wildfire researchers to improve the tools used to understand wildfire behavior, which helps fire managers better manage wildfires and to protect communities.

DRI scientist Dr. Adam Watts flies a drone over a prescribed burn site in Utah.

WaterStart: Using technology to save water

WaterStart has identified more than 100 technology priorities for members and deployed 33 technology pilots with a $30 million return on investment for WaterStart members.

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