



EDD

ECONOMIC
DEVELOPMENT
DEPARTMENT

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Homegrown NM Science and Tech Companies Awarded Small Business Innovation Research Grants

Santa Fe, N.M. – Three high-tech New Mexico companies will receive New Mexico Small Business Innovation Research (NMSBIR) Grants to help their businesses thrive, announced New Mexico Economic Development Department (EDD) Cabinet Secretary Alicia J. Keyes.

The three companies receiving awards for this round of the grant are UbiQD in Los Alamos, BennuBio in Albuquerque, and Mesa Photonics in Santa Fe. Each of these companies is developing technology that will greatly benefit mankind and are contributing to New Mexico's status as a leader in the fields of science and technology.

"These companies have proven that innovation thrives in New Mexico. The products they have developed will disrupt markets," Cabinet Secretary Keyes said. "The state assistance is helping these businesses grow faster and create the higher-paying jobs we need to diversify the economy."

The NMSBIR Grant Program provides recipients with additional resources to commercialize the technology developed using Federal SBIR funding. NMSBIR is designed to support local science and technology companies in achieving these goals. The grant program is overseen by EDD's Office of Science and Technology.

"The three awarded companies are prime examples of innovations, born right here in New Mexico, that started from a patent, developed a product, and are well on their way to commercializing their technology," Director of the Office of Science and Technology Myrriah Tomar said.

The Technology Research Collaborative (TRC) Board, who reviews applicants for this competitive grant, is made up of 11 university, science, and business experts. The initial seven applications were reviewed by the TRC Board before the final three were funded.

UbiQD is an advanced materials company powering product innovations in agriculture, clean energy, and security. Their novel quantum dots enable industry leaders to harness the power of light. Developed during phase I of the grant, their first product, UbiGro®, is a layer of light that uses fluorescence to create a more optimal greenhouse spectrum for crops. In other words, it's a glowing film that sits above plants and enables them to get

more out of the sun. NASA is interested in using this technology to enhance crop production on long-duration space missions or on a mars or lunar base.

This SBIR matching project will be leveraged to support critical to commercialization but not covered by the main NASA grant. The company has 34 active patents in its portfolio and funds will be used to support portfolio costs and new filings.

UbiQD also received a Phase I NMSBIR Matching Grant in November 2018 for \$25,000.

UbiQD is headquartered in Los Alamos, NM and they license technology developed at leading research institutions, including Los Alamos National Laboratory and MIT.

Read: [UbiQD raised \\$7 million for rollout of 'quantum dot' technology](#)



UbiGro inside a greenhouse. Photo courtesy of UbiQD.

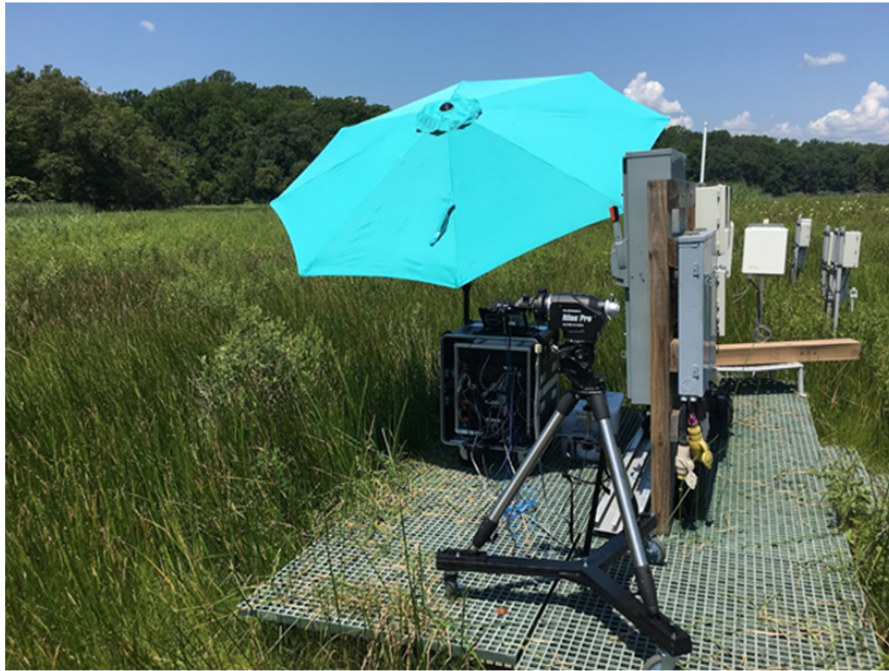
[Mesa Photonics](#) has created a ground-based remote sensor for measuring variations in humidity from the ground up to altitudes as high as 50,000 feet, used to improve weather forecasting and for better understanding climate. Mesa Photonics sensors can be set up anywhere. Humidity is measured using laser technology to observe extremely small changes in sunlight intensity. The laser light is fully contained within the sensor and, therefore, is completely safe.

Mesa Photonics will build and sell sensors to be used by natural gas leakage detection services to measure the amount of natural gas escaping from wells, production facilities, and distribution networks. Sensors will be transportable, easily deployed, fully automated, and (if needed) solar powered for off grid use.

NMSBIR matching funds will be used to build a beta-prototype natural gas leak sensor and to support field tests including measurements in the Four Corners region and the Permian basin. The design plans include packaging the sensor in a heavy-duty transit case that can be closed and locked for easy shipment. The prototype will be automated and set up at a test site will take less than 15 minutes.

Mesa Photonics is located in Santa Fe. They proudly participate in a workforce development project that provides Santa Fe Community College (SFCC) students with employable skills while earning an hourly wage (paid by SFCC) and academic credit.

Read: [Udall, Heinrich Announce \\$2 Million To NM Small Businesses To Support Scientific Innovation](#)



*An early version of the natural gas monitor deployed at a research site near Annapolis, MD.
Photo courtesy of Mesa Photonics.*

BennuBio has created their first product, Velocity, a flow cytometer that can analyze particles the size of a small BB, which is a near perfect starting point to create a High-Throughput Screening (HTS) platform that uses multicellular models (balls of many cells called 'spheroids' that can be 1 mm in diameter) for drug discovery. This enables the drug researchers to look at far more complex issues such as how drugs transport in tissues, how they affect cell to cell interactions, and many more complex interactions that only occur in tissues.

BennuBio, Inc sells flow cytometers, reagents, consumables, and assays that run on the instruments into the flow cytometry market. Their instruments will overcome current limitations to analytical rate, volumetric delivery, size of particles that can be analyzed, and sample preparation issues across several markets. In addition to Velocity, they are developing related products in sample handling and spheroid generation.

Bennubio began as a start-up at University of New Mexico (UNM) and is based on UNM research in flow-through cytometers, or cell meters.

Read: [**BennuBio Inc. Receives \\$1 Million Grant For Novel Biological Screening Technology Development**](#)

Read: [**Local tech startup snares \\$5M investment**](#)



Jose Lopez tuning new Velocyt instrument. Photo courtesy of BennuBio.

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The New Mexico Economic Development Department's mission is to improve the lives of New Mexico families by increasing economic opportunities and providing a place for businesses to thrive.

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