



ANNUAL
IMPACT REPORT
JULY 1, 2020 - JUNE 30, 2021



ARROWHEAD CENTER®



Mission

Arrowhead Center’s mission is to create economic opportunity and social mobility, tapping into the state’s innovative ideas and entrepreneurial spirit. We are an economic development engine for NMSU, New Mexico, the Borderplex, and beyond.

INNOVATION

We help turn ideas and discoveries into products and services that solve real-world problems.



ENTREPRENEURSHIP

We make entrepreneurship possible for anyone, from New Mexico’s K-16 students to those growing any type of business, anywhere in the state.

ECONOMIC OPPORTUNITY

We provide services and resources that support local and regional economies, and that help people benefit from the social mobility that results.



Please visit Arrowhead Center at arrowheadcenter.nmsu.edu

In Honor of Dr. Kevin Boberg



Dr. Kevin Boberg was one of the founders of Arrowhead Center, established in 2004, responding to growing opportunities for innovation and entrepreneurship-based economic growth in our region.

Kevin served as Arrowhead Center’s director until 2013, when he was appointed NMSU’s Vice President for Economic Development. Kevin retired from NMSU several years ago, but remained dedicated to economic development and to Arrowhead Center.

Kevin leaves an incredible legacy, particularly through his work with students – those he taught as a faculty member in NMSU’s College of Business, and those with whom he worked at Arrowhead Center. He always made time to answer questions and provide mentorship, delivered with his famously quirky sense of humor.

We extend our condolences to Kevin’s family, along with our thanks to him for helping to make Arrowhead Center what it is today.

Aggie Shark Tank brings together entrepreneurs and investors to introduce and fund new products and services. This year's Shark Tank highlighted a variety of industries: learning technology, outdoor/recreation, infant products, aviation, and personal protective equipment. Our Sharks were Isabella Ortiz (4S Bay Partners), Beto Pallares (Arrowhead Innovation Fund), and Drew Tulchin (New Mexico Angels).

Shark Tank participant, Steven Alderete pictured on right, pitched at Shark Tank with his 3D printed prototype of a revolutionary hydration water bladder dryer.



The Hunt Center supports student entrepreneurship programs, Borderplex economic development, an entrepreneur-in-residence program, technology-based business development, technology commercialization and new business seed investment.

HUNT CENTER PROGRAMS

We are delighted to welcome new entrepreneur-in-residence, Dr. Yun Li. She will provide technical assistance and entrepreneurial advice to clients, fueled by her experiences as a physicist and entrepreneur.

Dr. Li is interim CEO of Filtravate, a biopharmaceutical venture, and managing director of the New Mexico branch of VIC Technology Ventures, a development firm for technology-based businesses.

As an entrepreneur-in-residence, Dr. Li will advise entrepreneurs on the practical steps they need to take to grow their ventures, connect them to available resources, and bolster their professional networks.



Photograph provided by
Los Alamos National Laboratory

DR. YUN LI: FILTRAVATE

Dr. Li has worked in R&D and global program management for Fortune 500 companies, as well as small startups.

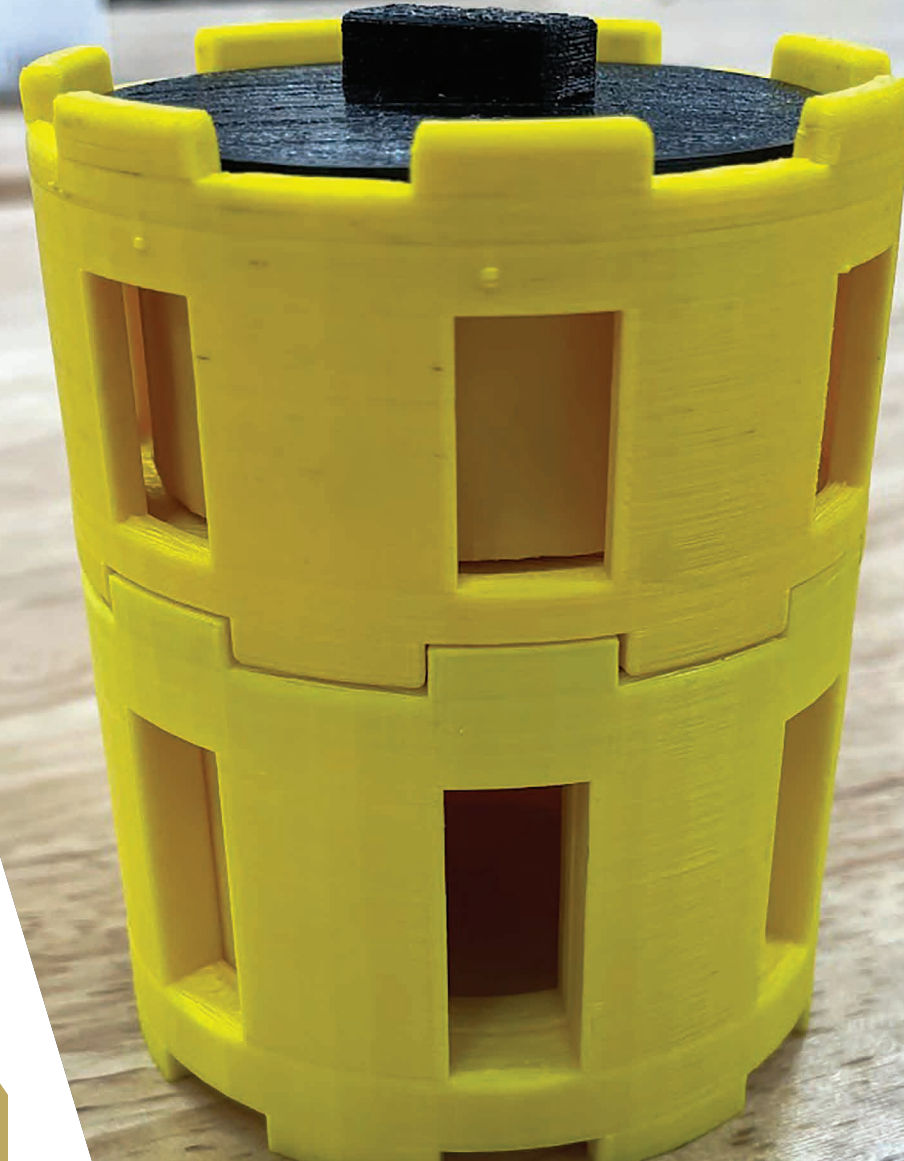
She notes, "I'm very technical but understand the need for interpersonal relationships. I love people who are brave and courageous about being an entrepreneur."

FIX is reshaping the regional economic landscape – on both sides of the international border. With partnerships throughout NM, TX, and northern Mexico. FIX is growing opportunities for entrepreneurs, companies, creating a more robust economy.

In addition to prototyping services (see opposite page), FIX sponsors business accelerator cohorts (including bilingual options), women’s entrepreneurship initiatives, and programming to help international companies relocate to the U.S. or expand into U.S. markets.



FIX provides AIS student aides valuable experience working with real-world challenges and opportunities. Featured from left to right, Veronica Gurrola and Hanna Linder, FIX participants.



A non-electrical pill dispenser that informs you if you’ve taken a dose that day designed by a student entrepreneur.



Featured above: a student entrepreneur designed custom role playing game dice

Through FIX Product Design Awards, ventures in the Borderplex region receive no-cost access to product design/ prototyping equipment, and to the electrical and mechanical engineering expertise that is crucial to product development. Services are provided through NMSU’s Aggie Innovation Space prototyping laboratory, which makes accessible to students, faculty, and community members technical resources and know-how to create product prototypes, hone product design, and address technical challenges.

In FY 2021, 15 FIX Prototyping Projects were completed, including products from the healthcare, outdoor, beauty and energy sectors.

► **\$125,000** worth of AWS Cloud Credits awarded to 6 entrepreneurs

Innoventure continued to adapt to the ever-changing education landscape, creating partnerships with new organizations, developing new online activities and being flexible with program delivery. Innoventure Challenge tasked teams with developing products that helped individuals and communities deal with problems created by COVID-19. Innoventure Jr. held online Facebook live events to reach new families across the state. Camp Innoventure moved online to offer entrepreneurial adventures to students across the country.



Innoventure partnered with El Paso's STTE Foundation for a 100 Day Challenge to guide middle and high school students in developing a business solution, pitching their ideas, building a pitch deck, and forming a network of like-minded partners to solve pressing problems.



Arrowhead Center employs talented students from colleges throughout NMSU, providing employment experiences that include work with real clients and businesses. Congratulations to student employees who graduated in May 2021, three of whom are profiled below.

Anna Kat Bates

Anna Kat helped establish a strong social media presence and brand for Arrowhead Center. She developed a very strong portfolio and has transitioned into a full-time position at NMCO Media, Las Cruces, New Mexico.



Blanca Martinez

Blanca Martinez was instrumental in growing many programs like Innoventure, Studio G, and more. She has expanded her skillset in graphic design and worked with many Arrowhead clients in brand development. In May 2021, Blanca graduated with a BFA in graphic design and is now a Graduate Assistant working for Arrowhead's FAST program.



Mariana Bucio

Mariana worked to establish a strong social media presence for the Arrowhead Innovation Fund, along with other Arrowhead Center programs and clients. Mariana now works as a communication specialist focusing on marketing and social media across all Arrowhead Center programs.



American Indian Business Enterprise

American Indian Business Enterprise works with Native American entrepreneurs throughout NM, helping to grow and promote their businesses to larger customer bases and markets.

Rochelle Garcia is the maker, baker, creator, and owner of Blue Corn Custom Designs, LLC (BCCD). With Indigenous farmers, artists, and herbalists who understand the importance of traditional goods, BCCD provides custom gifts for all occasions. BCCD made its first in-person sale in 2019 and is currently an online shop shipping worldwide. They work with local artists and farmers in the Southwest, as well as supporting grass-root organizations through fundraising efforts in vital environmental issues.

Studio G Student Business Accelerator

As the entrepreneurial lead, Megan Donart joined Studio G where she gained access to professional advisors such as accountants and IP attorneys. Simultaneously, Megan participated in Aggie I-Corps, a training program to test the feasibility of a novel deep-tech business idea. The goals of this program are to spur translation of research, to encourage collaboration between academia and industry, and to train students to understand innovation and entrepreneurship.

Megan also participated in Aggie Shark Tank where she learned how to create a pitch deck, pitched her business idea to investors (Sharks)”. During her presentation, Megan was provided with connections to possible partners and a Chief Financial Officer.

Honors

Arrowhead Director Kathy Hansen received an “A” Mountain Staff Award in 2020: an honor reserved for staff members who demonstrate NMSU’s core values in exceptional ways. Kathy noted, “NMSU has meant a lot to me both personally and professionally, and I am proud to be a part of its core values and to play a part in its success. As we move forward and all strive to ‘Be Bold and Shape the Future,’ I know NMSU’s success will only become stronger.”

We at Arrowhead extend our congratulations to Kathy. We are honored to have her as our leader.

Arrowhead Innovation Network

Arrowhead Innovation Network (AIN) continues to benefit the region’s creators and entrepreneurs with the guidance, advice, and connections needed to launch and grow businesses. AIN provides no-cost access to 53 experts from across the nation in a variety of industries, fields, and backgrounds – this year these experts held 875 meetings with clients.



Intellectual Property Highlights

Gary Eiceman

Dr. Gary Eiceman (Professor, NMSU Department of Chemistry and Biochemistry Department) and his team received a 12-month National Science Foundation (NSF) SBIR Phase I grant for \$256,000 to research paradigm-changing technology in heating, ventilation, and air conditioning (HVAC) systems. The team is using the grant to fund research in determining indoor air quality with a small, robust, affordable technology.



Reza Foudazi

Dr. Foudazi and his team developed membrane technology which can be used in industrial processing and water filtration. This technology was licensed by Arrowhead to a startup biopharmaceutical company, Filtravate. In recognition of this commercialization activity, Dr. Foudazi received the 2021 award for outstanding intellectual property.



Antonio Garcia

Dr. Antonio Garcia, Associate Dean of Academics, College of Engineering and Dr. Gabe Garcia, Associate Dean of Academics, will pursue a utility patent for the “Device and Kit to Enhance Airborne Particle Protection for Face Coverings and Masks”. NMSU students, Megan Donart and Katie Birtcil, participated in the Aggie Shark Tank competition with this invention.



Sprint Business Accelerators

Our Sprint business accelerators (intensive online experiences conducted virtually over 5-8 weeks) have continued to thrive. Between October 2020 and June 2021, Arrowhead staged 6 Sprint cohorts. These included cohorts dedicated to Las Cruces-, El Paso-, and Farmington-based businesses pivoting to deal with COVID-19 challenges; agriculture-focused businesses in El Paso County; a cohort for Native American entrepreneurs; and a cohort for businesses working in the outdoor recreation industry.

Sprints were supported by:

NM Gas Company, City of Las Cruces Economic Development Department, the EDA via i-CREW, the State of NM, El Paso County, the Albuquerque Minority Business Development Center, the Department of Energy, the MBDA, and the NM Outdoor Recreation Division.



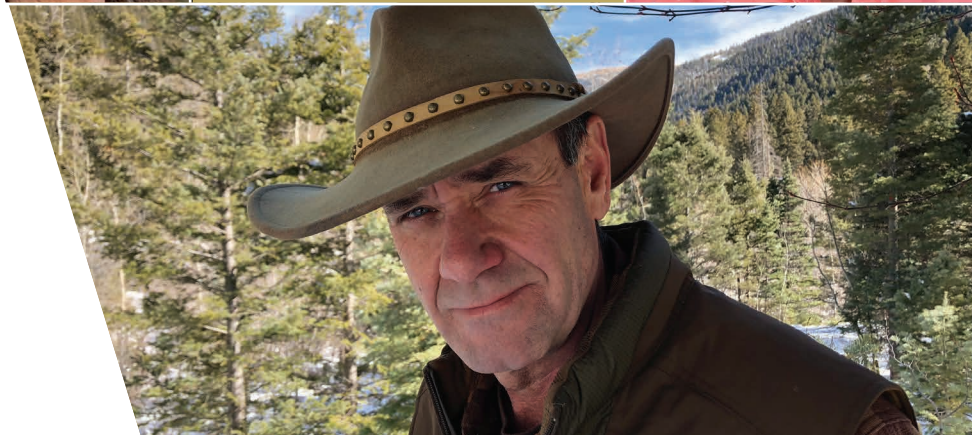
“I am thoroughly pleased with the knowledge, information and inspiration I have received from the Arrowhead BizSprint program. The speakers, consultations, advisors and resources have provided much more than I expected.”

Patricia Gray - Body Synergy



“The Arrowhead Center’s Energy Sprint was impactful, thought-provoking and caused us to challenge the fundamental assumptions of our business model, leading to new and interesting avenues to explore.”

Simon Woodruff



Sprint Business Accelerators

“I have met with several of the advisors and everyone has had something different to offer. They have all been professional, very helpful, and extremely friendly. The sessions are only 30 minutes but they do a great job at getting to the point and providing as much value per session as possible.”

Sonia Gonzales-Innovar, BizSprint participant

SPRINT HIGHLIGHT

Trevas Younger, The Heritage Assisted Living from Cohort 2 of BizSprint Las Cruces, earned \$285,574 in grants, gifts, and loan forgiveness throughout 2020.



NM Federal and State Technology Partnership Program (FAST)

Funded in part by the Small Business Administration (SBA), NM FAST provides NM with dedicated SBIR and STTR proposal development programming and assistance, with particular focus on serving first-time applicants. Since 2015:

- 250+ Clients served
- 90+ Outreach events
- \$72,000 Micro-grants awarded
- \$11.4 M in SBIR/STTR awards

NM FAST SBIR/STTR Resources include:

- Proposal development assistance
- Living library (templates, checklists, quick-start guides, etc.)
- YouTube channel
- Monthly newsletter
- SBIR/STTR curriculum
- SBIR/STTR accelerators
- Workshops, webinars, and events

NM FAST won a prestigious Tibbetts Award in 2020 for their work with SBIR/STTR clients.

arrowheadcenter.nmsu.edu/program/nm-fast/

**2020
Tibbetts Award**

Presented to

**Arrowhead Center
NM FAST Program**

*In recognition of your
outstanding contribution to the*

SBIR Program

U.S. Small Business Administration



Arrowhead Center SBIR Accelerator (ACSA)

Two tracks of ACSA (agency-focused and SBIR/STTR 101) were developed to provide direct, hands-on assistance throughout the proposal process. Since inception:

- 9 cohorts completed
- 76% First-time applicants
- 109 Participants
- 28 SBIR/STTR proposals submitted

SBIR/STTR Innovation Summit

NM FAST hosted the fourth annual SBIR/STTR Innovation Summit on December 9, 2020, and addressed funding opportunities through the SBIR/STTR programs. The virtual event had a broad impact, with 505 attendees from 44 states, Washington D.C., Puerto Rico, Buenos Aires, Germany, and India.

One-on-one sessions between small businesses and SBIR/STTR program managers were facilitated with Team Ships, NAVSEA Program Executive Office, Integrated Warfare Systems (PEO IWS), NAVSEA PEO Aircraft Carriers, NAVSEA Headquarters and Directorates (HQ & DIR), NAVSEA PEO Subs, and NAVSEA PEO Unmanned and Small Combatants (USC) – 128 of these meetings were held throughout the day.

Faculty Highlight

Dr. Rolston St. Hilaire’s work on Bigtooth Maple Tree, JFS-Nu Mex 3, was patented and licensed to J. Frank Schmidt (JFS) Wholesale Nurseries and is marketed under the trade name “Mesa Glow.” Rolston worked with JFS for eight years to bring the product to market, engaging them in production, testing, and marketing of the product. Sales to customers in 22 states and provinces have grown from 408 plants in 2016 to 2433 plants in 2021.



The Mesa Glow maple is now expanding its roots in not just caliche soil but also in the hearts of those who are attracted to the unique New Mexico creation, thanks to New Mexico State University researcher Rolston St. Hilaire. With the help of NMSU’s Arrowhead Center, St. Hilaire was able to patent the tree, three of which now grace the entrance of Arrowhead Park.

Economic Impact

Impact Area	Arrowhead Programs	Arrowhead Park	Total Effect
Jobs	1,819	704	2,523
Output	\$ 334.8 M	\$ 99.3 M	\$434.1 M
Tax Revenue	\$ 34.6 M	\$ 12.7 M	\$ 47.3 M

Arrowhead clients received \$28.5 M in public and private funding in FY21.

Arrowhead measures the expansion of economic opportunity for individuals and firms in terms of activities and results, including the economic impact of jobs. This table shows the number of total jobs (direct, indirect, and induced) in FY 2021, with associated impacts on economic output and tax revenues, estimated using IMPLAN, an economic impact model. Results are differentiated by those impacts generated through Arrowhead Center programs versus those generated in Arrowhead Park.



NMSU is an equal opportunity institution.
For disability accommodation, please contact Arrowhead Center.

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