Arrowhead Center Mission

Arrowhead Center’s mission is to create economic opportunity and social mobility, tapping into the region’s innovative ideas and entrepreneurial spirit.

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

ENTREPRENEURSHIP
We make entrepreneurship possible for anyone, from students to those growing any type of business, anywhere in the region.

ECONOMIC OPPORTUNITY
We provide services and resources that support local and regional economies and bolster social mobility.

We are an economic development engine for NMSU, New Mexico, the Borderplex and beyond.

Please visit Arrowhead Center at arrowheadcenter.nmsu.edu
Director’s Report

This year has been a time of exciting opportunities to grow programs, resource networks and partners, and physical resources, enhancing the robust suite of assets that serve our constituents.

Our team is dedicated to strengthening our entrepreneurship and innovation ecosystem, ensuring that we reach our diverse populations and provide access to resources for the underserved.

I wish to thank our partners and collaborators for the roles they played in Arrowhead’s impact this year. Together, we have created opportunities for people throughout New Mexico and the Borderplex region and are ensuring that the incredible potential of our communities is realized. It is our honor to help others succeed.

Kathryn R. Hansen
Hunt Center for Entrepreneurship

The Hunt Center creates an innovative, entrepreneurial ecosystem for the Borderplex region. By supporting a risk-taking culture where talented, diverse, imaginative people can experiment with their ideas; collaborating with industry and government to connect people and resources; and valuing philanthropy and volunteerism, the Hunt Center brings together what’s needed most to position the region for success.

The Hunt Center was instrumental in growing Arrowhead’s partnerships in El Paso, leading to the establishment of a student business accelerator at UTEP.

STUDENT SPONSORSHIPS

Driven by a desire to revolutionize agriculture, Arath Ramos-Coronado developed a mobile app to aid farmers in efficiently managing their tasks. His visionary product digitalizes farms to integrate technologies, empowering favorable financial results and maximizing production efficiency.
Successfully catering to more than 60 students. Innoventure’s Winter Break Camp welcomed younger elementary school students who developed prototypes for holiday products, while older students created products pitched to a judging panel. Winners of the pitch competition had the opportunity to compete at the Innoventure Final Challenge.

The Hunt Center acts as a central hub for fostering collaborative economic development within the region. Here, diverse stakeholders come together, working harmoniously to cultivate a flourishing economy teeming with opportunities.
Innoventure is Arrowhead’s K-12 entrepreneurship education program. Participants learn problem-solving, communication, public speaking, teamwork, ethics, and financial literacy: skills that enable them to identify and make the most of opportunities, learn from setbacks, and succeed in a variety of settings. This past fiscal year, Innoventure served over 7,000 youth.

Innoventure Challenge is a program for middle and high school students to think like entrepreneurs and design prototypes for a real-world theme. This year’s themes were based on clean energy, clean environment, and reducing carbon footprint. For the three preliminary rounds, students were challenged to create a new type of sustainable packaging, build a circulating compost bin, and design a greenhouse of the future. The final challenge theme revolved around ocean cleanup.

FY23 Innoventure Program Metrics:

- 7,186 Students served
- 36 Communities reached
- 5 Number of pitches and competitions

Innoventure Challenge 2023:

Kate Sanchez has participated in the Innoventure Challenge program for approximately 13 years. When her daughter, Isabel Sanchez, featured above, was younger, she would bring her to the competitions at NMSU and this year Isabel was on the 3rd place winning team the Slam Dunkers!
Studio G is Arrowhead’s college/university student business incubator, designed to propel students’ entrepreneurial visions into thriving startups. The program provides the essential momentum, guidance, and resources for entrepreneurs to confidently embark on their business journeys.

Studio G client Chelsea Lamengo featured on the left, showcased her entrepreneurial acumen at the Aggie Shark Tank event. Chelsea’s venture, Fundminer, successfully secured investments from private sources and effectively introduced its product to the market.
AIN continued to provide advising services to Arrowhead clients across numerous programs. This year seven new advisors joined the network of 64 active Enterprise Advisors. Over the course of the last year 573 meetings were held with clients through the network. The advising network connects Arrowhead clients with industry experts and service providers who can answer critical questions to help address business development needs.

FY23 Arrowhead Innovation Network Metrics:

- **64** Advisors
- **573** Meetings
- **286** Volunteer hours
- **7** New advisors

2023 Enterprise Advisors:
Arrowhead hosts an extensive network of Enterprise Advisors, comprised of industry experts from all sectors of the startup business journey.
Beto Pallares
Investor-in-Residence

Ebetuel (Beto) Pallares, a seasoned professional born in Cd. Juarez, excels in telecom, entrepreneurship, and venture investments. As the Bill and Sharron Sheriff Endowed Chair in Entrepreneurship at NMSU, he actively manages two funds, advises a family office, serves on private boards, and globally lectures on tech ecosystem development and startup mentorship, ecosystem development and startup mentorship.

Rodrigo Fuentes
Entrepreneur-in-Residence

Rodrigo Fuentes advises regional entrepreneurs and inventors working with various programs at Arrowhead Center. He is a native El Pasoan, and co-founded ListenLoop as a business-to-business Software-as-a-Service company, where he envisioned and built a new product from mock-up to its first $1M in revenue in less than a year. He is a strong asset in the regional entrepreneurship and innovation ecosystem.

Dr. Yun Li
Entrepreneur-in-Residence

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. Dr. Li has worked in R&D and global program management for Fortune 500 companies, as well as small startups.
NMSU Regents professor and biomedical researcher Dr. Jeffrey Arterburn (Chemistry and Biochemistry) received the 2023 Intellectual Property Award. The award recognizes faculty or staff who have developed intellectual property and worked to realize societal, industrial and commercial benefits. Dr. Arterburn is co-owner of seven patents related to treatments of diseases including cancer. Some of his work was brought to market by Linnaeus Therapeutics to treat melanoma, pancreatic ductal adenocarcinoma, non-small cell lung cancer and colon carcinomas.

**IP TECH/Transfer Patents Awarded**

US 11,433,359 B1: Antimicrobial filtration membranes

US 11,447,401 B1: Separation columns for per- and polyfluoroalkyl substances (PFAS) remediation
Ground broke on the Creative Campus for the $11 million DACC Creative Media Technology Building, which will open in 2024.

A U.S. Economic Development Administration-funded $1.74 million road/utility construction project launched.

Development agreements were signed for a new $22,000,000 speculative office building at Arrowhead Park, opening in 2025.

Highlight:

In 2023, Arrowhead Park received a $1 million grant from NMDOT for the development of a multipurpose trail, enhancing recreational amenities and promoting community well-being.
Worthington Farms worked with the NMSBA program, receiving support from NMSU food science faculty to conduct a shelf-life study on her line of pecan products including pecan butter, pecan flour, and pecan oil. After completion of the NMSBA project, Worthington Farms hired three new employees, increased sales by 40%, brought on 17 wholesale accounts, and received an investment of $30,000 from the New Mexico Job Training Incentive Program. The demand for its pecan products has increased to the point that it needed to buy additional pecan supply to fulfill orders.

FY23 New Mexico Small Business Assistance Metrics:

- **13** Businesses supported
- **20** Projects
- **7** Rural communities
- **6** Faculty experts
- **3** Student researchers
- **$170K** of Funding

Owner Kristen Worthing pictured above.
Arrowhead Center hosted 12 Sprint accelerator across New Mexico, serving 132 entrepreneurs. Among these participants 93% were from underrepresented communities, 56% minority owned businesses, 67% women owned businesses, 25% Native American owned businesses, and 9% veteran owned businesses. Participants were from 34 cities and 18 counties across New Mexico with 62% from rural communities.

The Sprints program continues its long-standing history of serving underserved and underrepresented communities, providing access to business education and resources for rural communities and critical industry sectors.

- MBDA Native American Sprint (2 cohorts)
- BizSprint Taos
- WE Sprint
- BizSprint Outdoor Recreation
- BizSprint Roswell
- AgSprint
- BizSprint San Miguel
- BizSprint San Juan
- FilmSprint
- BizSprint Hobbs
- BizSprint (General)
NM FAST: New Mexico’s source for SBIR/STTR assistance

NM FAST’s 6th annual NM Innovation Summit was held in December 2022, with more than 240 virtual attendees. Program managers and service providers from across the country held one-on-one coaching sessions.

NM supported clients with SBIR/STTR proposal package development resulting in 21 submissions across 8 of the participating federal agencies.

FY23 Highlights

12 Workshops held during FY23

4 Accelerators held during FY23

750 Attendees of events
NM FAST supports startups as they navigate SBIR/STTR funding. Clients Volver Health and NeutronStar won grants and contracts from NIH and DOD during FY23 totaling over $500,000 in federal investment.

Four NM FAST clients were awarded $2,000 travel stipends to attend TechConnect in Washington DC to learn about funding opportunities and to develop connections with federal program managers.
The New Mexico Clean Energy Resilience & Growth Cluster (NM CERG) fosters clean energy startups, showcasing advanced technologies, and driving the region’s clean energy sector forward.

**EPIC 2 Showcase Pitch Competition**

NM CERG’s Argyle Earth secured 2nd Place, highlighting cluster support for clean energy startups.

**Innovative Technology Development: Tom Sherlock’s Refrigerator**

Tom Sherlock’s move to Las Cruces showcases NM CERG’s impact. His Stirling heat pump is a renewable breakthrough using solar-concentrated thermal fluctuation.

**EnergySprint Cohort: A Game-Changer**

Photon Vault Inc. and others succeed in the 6-week clean tech startup program, gaining insights and funding startups.

**EPIC 2 Showcase Pitch Competition**


“NM CERG spared us wasted time, guiding through the grant process, fostering self-sufficiency in securing government funding.”

- Kristina McMillan, CEO & Co-Founder Argyle Earth featured above
LabTech Connect: Bridging Gaps Between Innovators and National Labs

“LabTech Connect” successfully promoted NM CERG-National Lab interactions, proving effective for collaborations. Attendee feedback highlights its value in insights on government grants and private investments.

Flow Aluminum, Inc.: On the Rise

Flow Aluminum, a NM CERG participant, showcased its technology at TechConnect’s 2023 Defense Innovation Challenge, gaining recognition and featuring at the Defense TechConnect Exhibition Reception.

Looking Ahead: As NM CERG moves into its third year, plans are underway for more events like LabTech Connect, further enhancing the synergy between clean energy startups and established industry players. The continued success of NM CERG participants in competitions and their growing recognition in the clean energy sector are testaments to the cluster’s effective support and guidance.

“The personalized assistance we received from NM CERG was bar-none the best startup assistance from any entity in the State.”

– Matt Higgins, Hawk Spider Energy featured above
Along with the entire NMSU System, we at Arrowhead Center have been taking steps to ensure diversity, equity, and inclusion (DEI) practices are at the center of planning, programming, and organizational evolution. We are dedicating continued effort to consciously and thoughtfully increase our DEI impact.

Aggie I-Corps successfully led the first-ever fully Spanish I-Corps cohort, which included 22 teams. This unique initiative not only provided a significant educational opportunity for Spanish-speaking students and community startups but also fulfilled a critical DEI requirement for the Southwest I-Corps Hub, reinforcing our commitment to fostering an inclusive innovation ecosystem.
The FIX prototyping program was crucial in transforming the Social Patch concept into a 3D model, revolutionizing social networking by merging physical and digital realms. Beyond a stylish accessory, it serves as a gateway for instant connections, allowing users to share social media profiles through a quick scan. FIX’s resources and expertise were vital in translating the vision into a tangible product, refining design, enhancing functionality, and ensuring a cohesive user experience. Social Patch is a testament to collaboration and innovation in the tech industry.

**Aggie Innovation Space at New Mexico State University**

**Prototyping**
- 9 branding projects completed for cleantech startups
- 5 projects completed

**Cloud Credits**
- $50k awarded in Amazon Web Services
- Cloud Credits

**FIX highlights**

- 9 Branding projects completed for cleantech startups
- 2 Branding projects completed
- 2 Website projects completed
Entrepreneur Miguel Rico flourished through Arrowhead's Fintech Lab program. He gathered valuable feedback by testing his Tattoo Ink concept in the 2022 Pitch Competition. Later, in the 2023 Aggie Shark Tank cohort, he refined his business model, creating a marketplace connecting tattoo enthusiasts and local artists. His pitch prowess earned him the Crowd Favorite Award. Currently, Miguel is developing a website and software application for Tattoo Ink, with a wait list of artists eager to join the innovative platform.
Akeemi Martinez of Indigibean Productions (pictured right) joined AIBE to develop a product to help promote and preserve Native languages, such as Navajo. Akeemi will seek opportunities to integrate her product in local school systems.

The American Indian Business Enterprise (AIBE) Center is located at Arrowhead Center. Since its formation in 2019, the AIBE Center has served over 200 Native American entrepreneurs across the state of New Mexico and the Navajo Nation, with a mission to provide economic opportunities for diverse communities. In FY23, the AIBE Center provided entrepreneurial training while cultivating an inclusive environment and providing teachings through a tribal lens to 85 Native American entrepreneurs.

Sage Mountainflower is an indigenous artist in the fashion industry. She was recently invited to participate in and showcase her clothing line at the Paris Fashion Week. Sage continues to scale her business while increasing revenue through 2023.
Economic Impact

Arrowhead Center annually assesses the economic influence stemming from its entrepreneurship initiatives, research park, development, and investments.

The economic impact analysis encompasses direct, indirect, and induced effects. The data on the right illustrates the total effect of Arrowhead programs and Arrowhead Park on job creation, output, and tax revenue.

Additionally in FY 2023, Arrowhead Innovation Fund portfolio companies supported 179 total jobs, $27M in output, and $3.8M in additional tax revenues.

<table>
<thead>
<tr>
<th>Impact Area</th>
<th>Arrowhead Programs</th>
<th>Arrowhead Park</th>
<th>Total Effect</th>
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<tr>
<td>Jobs</td>
<td>767</td>
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<tr>
<td>Output</td>
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“Arrowhead is committed to enhancing our impact on the economy, communities, and residents of the region through our innovation and entrepreneurship programs and resources, with continued focus on under-represented populations.”

–Kathy Hansen, Director of Arrowhead Center
The Arrowhead team is a dedicated group of professionals committed to creating opportunities through entrepreneurship and innovation.