

2019 PROGRAM OVERVIEW



Ben Franklin
Technology PArtners

Central & Northern PA

www.cnp.benfranklin.org

Ben Franklin Technology PArtners of Central and Northern PA provides investment capital and business support services to tech-based startups and small manufacturers located in our 32-county footprint.

“Energy and persistence conquer all things.” – *Benjamin Franklin*



Message From the President/CEO



Regions that invest in innovation build economies that create high-paying jobs, accelerate business growth, and draw outside capital. The more vibrant and sustainable our entrepreneurial ecosystems are, the more we attract and keep new companies and talent while also providing opportunities for our own graduates and job seekers. Since our program's inception nearly

four decades ago, Ben Franklin Technology PARTners of Central & Northern PA has been investing in new products and services developed by early-stage tech startups as well as those from the small manufacturers in our 32-county footprint.

We're proud of our portfolio companies, many of which have gone on to become industry leaders. With their accomplishments in their respective fields, as well as the countless people they now employ, we are reminded of the importance of having a fully funded state program that shares the inherent risk involved in investing in innovation. We take our responsibility to our clients and the taxpayers in the Commonwealth seriously. Routinely, Ben Franklin engages in an in-depth, independent economic analysis of our program across the entire state that measures our impact on employment, new product development, tax revenue generated, and even the overall gross state product. This year's results are impressive and can be viewed at <https://bit.ly/2U8aP83>.

But it's often our clients that really tell our story best. Todd Erdley, CEO of Videon Central, commented, *"Had it not been for the support of Ben Franklin at the time I was starting my company, we would not be where we are today — partnering with AWS and Qualcomm to enable a sea change in the world of video live-streaming. Working from our facility in State College, we now develop software and design hardware for audio/visual products worldwide and employ 40 people."*

Stephen Brawley, *President & CEO*

Ben Franklin Made Investments in the Following Companies:

Company	County
AE Resources, Inc.	McKean
Aimee's Babies, LLC	Lancaster
Benefix, LLC	Lancaster
CityGrows, Inc. d/b/a CityGrows Technology	Erie
ConidioTec, LLC	Centre
Creating Moore	Lebanon
Croptix	Centre
DUB Diversified d/b/a Baby Arrival Monitor	Mercer
Erie Artificial Intelligence	Erie
Eternal Remembrance, LLC	Cambria
Full Stac, LLC	Dauphin
Keystone Healthcare Technologies	Dauphin
Lajic, LLC	Crawford
MajorMega, LLC	Lancaster
MakerPlace, Inc.	Erie
Mangrove Jack Marine USA, Inc.	Cambria
Mark Albert, LLC	Somerset
MaxBack, LLC/ShiftR	Erie
Melanin Essentials	Lancaster
Miller Fabrication Solutions	Jefferson
Mission Critical Solutions, LLC	Bedford
Magnitude Instruments	Centre
Noodigs Realty Services (NRS)	Lancaster
Olympus Advanced Technology, LLC	Erie
Omega Notes	Centre
Persea Naturals, LLC	Centre
Phospholutions, LLC	Centre
Rebric, Inc.	Erie
Reflexion Interactive Technologies	Lancaster
Schroth Industries, Inc.	Indiana
SIG Medical Corp.	Dauphin
SimpleSense, Inc.	Erie
Steller Innovations, LLC	Huntingdon
TEAMology, LLC	Franklin
TechKnowServe Corporation	Centre
Video Directives, LLC	Erie
Virtual Readiness Advisors, LLC d/b/a CAPS	Erie
Xact Metal, Inc.	Centre

2018/2019 SNAPSHOT OF THE CENTER'S IMPACT

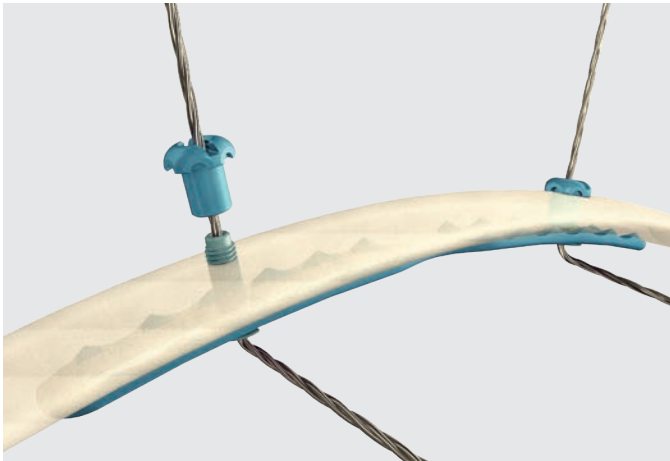
- 270 jobs created
- 1,154 jobs retained
- 508 companies assisted
- 38 company investments
- \$227,178,328 revenue generated
- 47 new products developed
- 37 new processes created
- 25 new patents awarded
- \$66,543,382 in follow-on funding generated

COMPANY SNAPSHOT

The largest early-stage investor in the state, Ben Franklin Technology Partners is among the most widely known and emulated technology based economic development programs in the nation. Our client portfolio is comprised of industry sectors as diverse as the demographic make-up of central and northern Pennsylvania. The following is a snapshot of some of our newest portfolio companies that have developed innovative products and services in areas such virtual reality, life sciences, ed-tech, advanced manufacturing, pest control, and app development.

MajorMega

MajorMega's patent-pending, custom software and hardware with cutting-edge virtual reality (VR) creates an unparalleled immersive experience. The company's software brings together a mechanical platform, custom wind system, heating dispensers, and proprietary "force-feedback" input devices to simulate any environment imaginable. The result is a turnkey VR product that enables a human experience unlike anything before in a package that can go just about anywhere and scale to any size. Current clients include Converse, Ferrari, Citi, and National Geographic. Recent praise from the press includes a comment from Forbes: *"Thanks to National Geographic and MajorMega, I was able to experience landing on Mars."* <https://majormega.com>



SIG Medical developed a patented rib fracture bone repair kit that allows for a minimally invasive surgical technique to be performed on those who have experienced fractured ribs. Recently, the U.S. Food and Drug Administration (FDA) granted 510(k) clearance for Sig Medical's enhanced AdvantageRib System. This product marks the company's third rib fracture 510(k) that will be commercialized. The company is pioneering rib fixation optimized for the operating room. Its mission is to provide more immediate and definitive patient care which will reduce pneumonia, the time spent in intensive care, chronic pain, ventilator support, and chest wall deformity, while accelerating the patient's recovery. SIG Medical's goal is to improve patient care and significantly reduce the overall cost to the healthcare system. www.sigmedical.net



Counselor Advantage Program for Success (CAPS)

As mandated by the US Department of Education, every school is required to provide college and career readiness programs. The CAPS platform, which replaces the paper-based Excel spreadsheet system often currently used, provides a learning management system with a structured curriculum and audio, text, and video content. These tools are aimed at helping students and their parents measure preparedness for post-secondary college and career options. The program's real-time access via any mobile device allows for all interested parties such as parents, school counselors, and mentors the ability to assess progress as students receive real-time feedback. The tools also help overworked school counselors and the parents/students who need significant guidance on all topics related to the college application process. With 19 education industry subject matter experts as advisors, the CAPS platform has already been deployed in more than a dozen school districts. www.capspsse.com



Lojic’s tagline is “All Your Data in One Place.” Many manufacturers tend to house information in different silos which are difficult to integrate. Critical data subsequently cannot be accessed to produce meaningful reports that allow for corrective action. Decision making is often a difficult, paper-laden process. Lojic provides software systems and apps that are easy to use, powerful, and integrate with all currently used systems, eliminating the need to duplicate data entry. The company offers its customers not only deep knowledge of the industry but also the ability to integrate with off-the-shelf enterprise (ERP) and management systems. Lojic’s dashboards display data in real time, which allows the employee or the shift supervisor to identify potential issues before there is a costly problem. <https://lojic.us>



ConidioTec

Natural Urban Pest Control

Bed bugs are a serious and growing problem, and methods of control are difficult at best. Currently, there is no way for hotels or homeowners to prevent bed bug incursions. Most hotels train staff in early detection and act rapidly in response to identified infestations. Bed bugs are incredibly difficult to eradicate with chemical sprays as the process requires multiple applications over a period of three weeks. However, the chemical treatments require that the infested rooms be out of service during the treatment period, which leaves many establishments opting for heat treatments at approximately \$800 per room. These treatments have their own limitations in that they frequently fail and offer no protection from re-infestation. ConidioTec’s product, Aprehend®, is a non-toxic, effective fungal bio-pesticide that is effective with only a single, long-lasting application. In addition, Aprehend® can be used as a preventive treatment applied in hotels to mitigate bed bug incursions before they can establish or after heat treatment. www.Aprehend.com





Eternal Remembrance

WHERE LOVING MEMORIES LAST FOREVER

For those experiencing the loss of a loved one, Eternal Remembrance delivers an easy-to-use virtual-memorial mobile app. This product provides a simple, innovative way to connect, celebrate, and honor a loved one's legacy. Using mobile GPS, Eternal Remembrance pairs the profile of the loved one with the geo-location. Until now, there was no way to memorialize a deceased loved one which tied their memories to physical locations. According to industry research, trends that involve funeral home and cemetery visits are in decline, while much of the funeral home and memorial industry has remained unchanged for decades. The use of technology has been growing exponentially in comparison, and customers expect industries to evolve with it. The virtual memorial mobile app developed by Eternal Remembrance is paired with beautifully crafted emblems and coins to fill the retail niche for the "in lieu of flowers" market, which is expanding rapidly throughout the florist and funeral industries. www.EternalRemembrance.com



Small to mid-sized companies that would like to enter metal 3D printing often find it's not feasible due to the high acquisition costs (system price, metal powder price, and lack of qualified personnel). Xact Metal™ is taking the essential specs for metal powder-bed fusion (commonly known as selective laser melting or direct metal laser sintering) and combining them with breakthrough technology to establish a new level of price and performance for additive manufacturing. The company is dedicated to supporting the next generation of innovative manufacturing solutions powered by metal 3D printing. Xact Metal's patent pending platform reduces overall cost by 50-60 percent, without sacrificing performance or margins. Potential customers include university labs and printing services bureaus that serve the aerospace, defense, automotive, education, healthcare, and engineering industries in North America, Europe, and Asia. www.xactmetal.com



ALUMNI COMPANY SPOTLIGHT

Ben Franklin's portfolio is comprised of companies that represent a wide array of tech sectors and are in varying stages of business growth and development. Many have become recognized leaders in their respective industries.

videon

simply moving media



In 1997, with funding support from Ben Franklin, Todd Erdley and a group of co-founders created Videon Central. In the company's early years, they became experts in optical disc technology, developing DVD and Blu-ray Disc navigators, boxes, and in-flight entertainment applications. As the media market evolved to incorporate streaming media and more sophisticated video encoding processes, Videon evolved too. Today, the company develops products for audio/video applications in the consumer electronics, pro AV, aviation, and automotive industries. Videon is now a cutting-edge developer of 4K and HD encoding and streaming products that enable prosumers and professionals to move media from any source to any screen. While the company's streaming systems enable simpler, more economical streaming of high-quality video, its modules and services help manufacturers bring their products to fruition. Through partnerships with leading silicon and software companies, Videon technology has been incorporated into over 30 million devices. Videon simply moves media. More information is available at streaming.videon-central.com.

R RETURNLOGIC



ReturnLogic, located in Camp Hill, has commercialized a returns optimization platform for modern retailers. Often overlooked as a cost of doing business, returns have been shown to erase a retailer's profits and damage the customer experience. ReturnLogic technology solves these problems by assisting retailers with the internal operational workflows, while collecting valuable data and generating actionable business insights. With proprietary data and customer behavioral insights, ReturnLogic comes to market with an innovative technology solution that has already shown significant customer traction and growth. Visit www.returnlogic.com.

KCF

technologies



Ben Franklin's investment in KCF Technologies has paid off in more ways than one. Several years ago, seed funding and business support services were awarded to the company to develop a line of SmartDiagnostics® products that accurately predict machine downtime. The company's wireless machine-condition monitoring systems effectively detect small problems before they become big failures.

With more than 16 patents protecting KCF's innovations, its more than 100 employees are recognized in the industry as experts in the field of vibration and acoustics and bring unique wireless sensor networking, high-performance computing, and machine-to-machine technology know-how to every system implementation. In 2018 the company announced its intention to expand its headquarters by leasing another nearly 15,000 square feet, in addition to two other existing locations in the downtown State College area.

In January 2019, the company, which has been growing at a rate of more than 60% a year, repaid the balance on its Ben Franklin investment early, allowing the re-allocation of those much-needed dollars to at least three new startup opportunities in the region. www.kcftech.com

ENTREPRENEURIAL SUPPORT PROGRAMS

Ben Franklin makes investments not only in emerging tech startups and new products developed by small manufacturers, but also in entrepreneurial development programs that support early stage entrepreneurs with mentoring, training, and networking resources.

Transformation Business Services Network

A team of seasoned business professionals with experience in all aspects of starting and running a company offer no-cost, hands-on assistance to Ben Franklin’s portfolio members. The support and mentoring provided by these subject-matter experts is often just as valuable to the clients as the actual funding. Annually, the collective team spends more than 10,000 hours providing one-on-one support on topics such as marketing, understanding financial statements, strategic planning, accounting practices, office setup, advertising, and human resource planning. In addition, the members of the Transformation’s team are the primary source of support to those emerging entrepreneurs who are chosen to participate in our business startup boot camps.

Tech StartUPS Get Their “START” With Ben Franklin’s TechCelerator Startup Boot Camps



Ben Franklin’s TechCelerator Startup Boot Camps help create a pipeline of early-stage deal flow by supporting an environment that allows those who are thinking

about starting a tech business to explore the likelihood of success with a minimum of risk, the benefit of a safety net, and professional guidance.

Since the program’s inception in Carlisle and State College nearly eight years ago, cohorts of six to eight participants across our footprint have been introduced to a rigorous 10-week curriculum that includes a variety of topics such as customer discovery, basic financials, revenue models, and presentation skills, to name just a few. At the culmination of the 10 weeks, each person or team can pitch their business idea to

a panel of local professionals, with the possibility of winning cash prizes up to \$10,000. Many of the graduates later become eligible to apply for Ben Franklin funding. During the 10-week process, the teams receive stipends to assist with prototyping and customer discovery expenses as well as initial legal and accounting advice.

This past year, with funding support from the Startup Alleghenies initiative and Invent Penn State, the TechCelerator program expanded to include locations in Altoona, Johnstown, Somerset, and Lancaster. To date, across all locations, more than 200 teams have graduated and in turn have formed 150 companies – companies that are generating \$24 million in revenue. Ben Franklin has invested roughly \$3 million in 18 of the startups. While 47 of the companies were formed based on Penn State’s technology, perhaps the most exciting outcome has been the job creation of nearly 200 new positions.



Bob Dornich (right) presents the TechCelerator@State College award to the Medulate team

Venture Investment Forum (VIF)

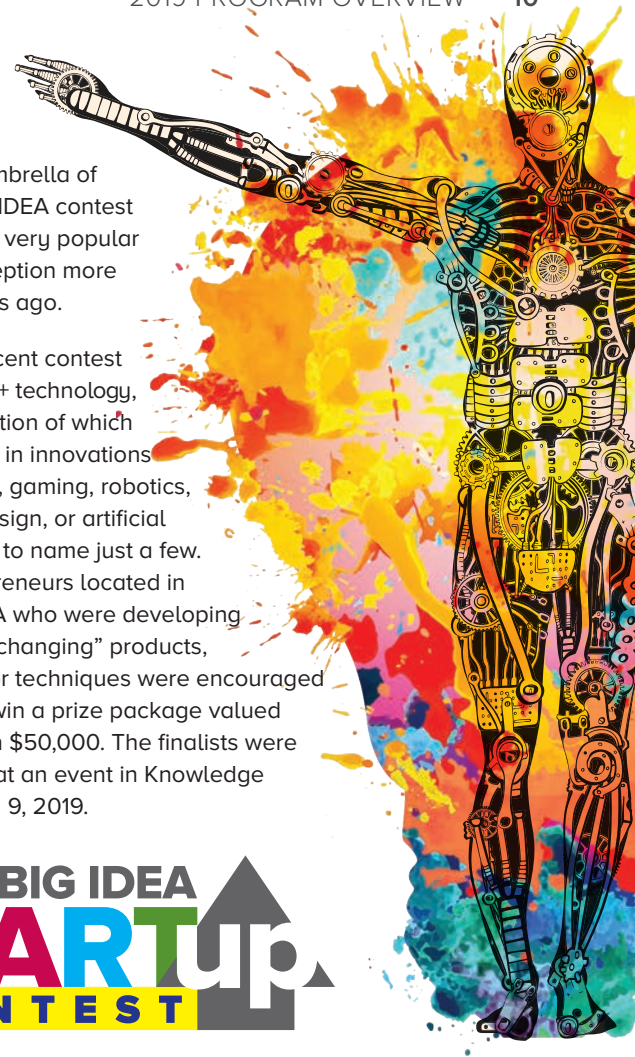
Ben Franklin’s Venture Investment Forum (VIF) provides training programs designed to assist high-potential entrepreneurs with their pitch presentations as they begin concentrated efforts at accessing follow-on funding opportunities. This past year, 204 registrants availed themselves of the training, which included topics such as: Professional and Personal Elevator Pitches; Federal Grant Opportunities (SBIR/STTR); QuickBooks, and Getting Ready for Equity. In addition, the LaunchLINK series of videoconference training sessions began late last summer, connecting entrepreneurs and economic development partners in some of the most rural communities in our footprint for networking and learning.



VIF is also home to the eMarketing Learning Center, www.emarketinglearningcenter.org, which provides webinars and live seminars related to digital sales, marketing, and ecommerce. Recent sessions included topics such as: Google Lead Generation; Ad Campaigns – What Worked and What Didn’t; How to Build a Brilliant Marketing Plan; and Ten Top Tricks for Lead Generation.

Also housed under the umbrella of VIF, the BIG IDEA contest has become very popular since its inception more than 15 years ago.

Our most recent contest targeted art + technology, the combination of which often results in innovations in animation, gaming, robotics, industrial design, or artificial intelligence, to name just a few. Tech-entrepreneurs located in northwest PA who were developing new “game-changing” products, processes, or techniques were encouraged to apply to win a prize package valued at more than \$50,000. The finalists were announced at an event in Knowledge Park on May 9, 2019.



ADDITIONAL FUNDING TOOLS



The Erie Innovation Fund

Funding support in the amount of \$1 million provided from the Erie County Gaming Revenue Authority (ECGRA) helped create an additional pool of investment capital for tech startups and small manufacturers located in Erie County. Matched at 1:1 by Ben Franklin, the funding was used in 2018/2019 to invest in an additional seven companies. \$300,000, provided as a grant by ECGRA, will help launch the first in a series of Business Startup Boot Camps, offered by the BF TechCelerator@Erie.



Investing in the Penn State Community

The 1855 Capital Fund, which was created with the support of Ben Franklin, invests in companies with an affinity or relationship with Penn State University. This includes University Park, Hershey Medical Center, the Commonwealth Campuses, and any alumni living in the United States. The fund looks for potential growth companies in the information technology, advanced materials, fintech, edtech, and healthcare/medical devices sectors. This initiative, while intended to help spur economic growth, job creation, and student success, also provides Ben Franklin companies, such as Phospholutions, Pledge It, and Reflexion, with another source of investment capital. www.1855capital.com

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BFTP/CNP

OFFICE LOCATIONS & CONTACT INFORMATION

Northwest Region

Clarion	Mercer	Brian Slawin
Crawford	Venango	5240 Knowledge Parkway
Erie	Warren	Erie, PA 16510
Forest		814.898.6650

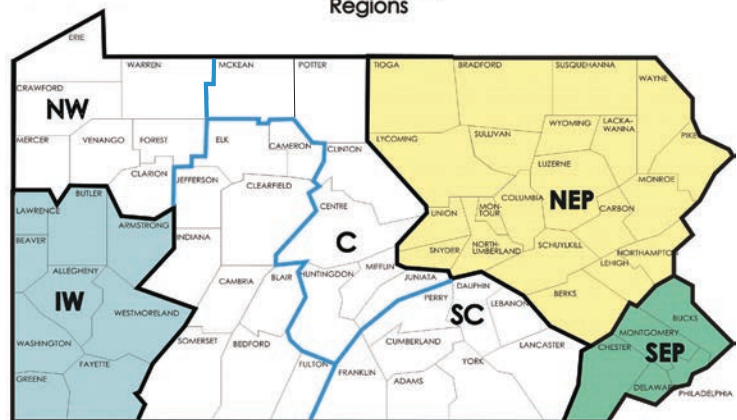
Central Region

Bedford	Huntingdon	Bill Hall
Blair	Indiana	John Siggins
Cambria	Jefferson	200 Innovation Blvd.
Cameron	Juniata	Suite 150
Centre	McKean	State College, PA 16803
Clearfield	Mifflin	814.863.4558
Clinton	Potter	
Elk	Somerset	
Fulton		

South Central Region

Adams	Lancaster	Richard Heddleson
Cumberland	Lebanon	1010 N. Seventh Street, Suite 304
Dauphin	Perry	Harrisburg, PA 17102
Franklin	York	717.948.6339

Ben Franklin Technology Partners
Regions



Andrew Long
The Candy Factory
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Ben Franklin Technology PARTners/CNP, an initiative of the Pennsylvania Department of Community and Economic Development and funded by the Ben Franklin Technology Development Authority, provides investment capital and business support services to emerging tech-based companies and small manufacturers for the purpose of creating and retaining jobs in Pennsylvania. Contact the Central Office of Ben Franklin in University Park at (814) 863-4558 or see our website at: www.cnp.benfranklin.org