

#### BEN FRANKLIN TECHNOLOGY PARTNERS of NORTHEASTERN PENNSYLVANIA

# IGNITING THE SPARK

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"An idea alone, no matter how brilliant or innovative, isn't enough to build a viable company.

## The spark needs to be ignited. Enter the Ben Franklin Technology Partners.

We leverage funding from the Commonwealth of Pennsylvania to help entrepreneurs and manufacturers

commercialize their ideas with investments, links to proven resources,

introductions, and in-house expertise."

#### R. CHADWICK PAUL, JR.

President and Chief Executive Officer Ben Franklin Technology Partners of Northeastern Pennsylvania



# IGNITING THE SPARK THROUGH LEVERAGE

BEN FRANKLIN TECHNOLOGY PARTNERS LEVERAGES STATE FUNDING to help entrepreneurs and manufac-

turers commercialize their ideas with investments, links to proven resources, introductions, and in-house expertise. Ben Franklin ignites the spark.

We are an extraordinary asset to Pennsylvania. Our work returns an incredible \$3.90 in incremental state tax revenue for every \$1 of state funding we receive. And Ben Franklin leverages Pennsylvania's funding in so many more ways.

"The results of Ben Franklin's work are highly paid, sustainable jobs; a diversified, resilient economy; and the invention of products and services that improve the human condition."

> We provide seed capital to promising young companies that are often too early in their development to be interesting to other investors. Based on more than 35 years of institutional wisdom and a record of thorough vetting, support, and success, Ben Franklin has developed a reputation of excellence

with innovation.

among venture capitalists, angel investors, and other institutional investors. This is important because a Ben Franklin investment is rarely enough to bring an early-stage firm to profitability. By earning a place in our portfolio, entrepreneurial clients can leverage that valuable endorsement with Ben Franklin network introductions for additional consideration among follow-on funders. Part of our mission is to link early-stage technology firms and established manufacturers with Pennsylvania's colleges and universities. We leverage the resources of each to their mutual benefit. By connecting clients with the staff, students, equipment, and resources of these schools, we provide higher education with opportunities for real-world application of academic expertise and classroom experiences. The knowledge, access to equipment, and "extra set of hands" that our client companies receive from the colleges and universities allow them to be more globally competitive

Through our Ben Franklin Business Incubator Network, among the largest in the U.S., we apply decades of business incubation know-how to the

benefit of the 13 member incubators in their support of young companies. As the owner and manager of the award-winning Ben Franklin TechVentures<sup>®</sup> incubator and the Bloomsburg Regional Technology Center, we leverage our deep incubator experience to the benefit of the entire region.

So what does all this leverage do for Pennsylvania? Ben Franklin Technology Partners has played a leadership role in growing companies in technology-based sectors that have substantially improved the state's economy. Thirty-five years of strategic, productive, and cooperative work in improving the business technology ecosystem has generated real impact.

The results: highly paid, sustainable jobs; a diversified, resilient economy; and the invention of products and services that improve the human condition. The spark is ignited!

too

R. Chadwick Paul, Jr. President and Chief Executive Officer Ben Franklin Technology Partners of Northeastern Pennsylvania

LEARN HOW BEN FRANKLIN LEVERAGES SUCCESS **PAGES 14-24** 

# PROGRAM OVERVIEW

THE BEN FRANKLIN TECHNOLOGY PARTNERS OF NORTHEASTERN PENNSYLVANIA (BFTP/NEP) is part of a four-center, state-funded economic development initiative that began in 1983. The Ben Franklin program was created by the Commonwealth to play a leadership role in strengthening regional economies, building Pennsylvania's technology-based economy, and creating and retaining highly paid, sustainable jobs. The northeastern center is headquartered at Ben Franklin TechVentures<sup>®</sup>, a technology incubator/post-incubator facility on Lehigh University's Mountaintop Campus in Bethlehem, Pa. Regional offices are located in Bloomsburg, Reading, and Scranton.

BFTP/NEP's mission is to promote, sustain, and invest in the development of our regional economy through innovation and partnering. Our strategy encompasses three key areas:

- 1. developing and growing early-stage technologyoriented companies;
- 2. supporting established manufacturers as they creatively apply new technology to help them succeed globally by producing better, faster, and at a lower cost; and
- **3.** promoting an innovative community-wide infrastructure that supports Pennsylvania's business technology ecosystem.

Ben Franklin works with the most promising ventures that offer significant potential for future job growth through the development of a new technology or an innovative application of existing technology. To qualify as clients, companies must be located in, or relocate to, BFTP/NEP's 21-county northeastern Pennsylvania service area: Berks, Bradford, Carbon, Columbia, Lackawanna, Lehigh, Luzerne, Lycoming, Monroe, Montour, Northampton, Northumberland, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, and Wyoming. We refer companies in other Pennsylvania counties to one of our three colleague Ben Franklin Technology Partners organizations headquartered in Philadelphia, Pittsburgh, and State College.

As hundreds of companies have experienced, Ben Franklin delivers hands-on support, connections to critical resources, and investment funds at companies' most vulnerable times. BFTP/NEP helps clients to

> BEN FRANKLIN **TECHNOLOGY PARTNERS STATEWIDE RETURNED \$3.90** IN NEW TAX REVENUE FOR **EVERY \$1 INVESTED** FROM 2012 TO 2016.



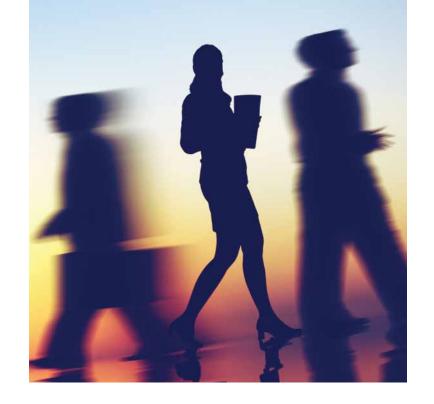
achieve and sustain market success and competitive advantage. We are evaluated on the basis of the job creation, job retention, and commercial accomplishments of our clients that are achieved as a result of our assistance.

**CAPITAL** — Ben Franklin investments in early-stage firms typically range from \$30,000 to \$100,000 for each tranche, with a maximum total investment over several years reaching \$300,000 to \$400,000. We take calculated risks investing in young, unproven companies. We assist early-stage firms as they prepare to raise additional capital and provide them with an important and wellrespected initial endorsement.

We also support established manufacturers by providing investments in innovation of up to \$25,000 for each project, for a total not to exceed \$150,000 per client. The work is usually technology development or applicationdriven and is accomplished with a college or university partner. The goal is to make the client's product or manufacturing process better, less costly, and/or more competitive.

#### **BUSINESS AND TECHNICAL EXPERTISE** – Each

company in the Ben Franklin portfolio benefits from the collective experience of seasoned professionals who focus on turning high-potential ideas into high-growth businesses. In-house expertise is complemented by the Ben Franklin Solutions Network of advisors, professional service providers, investors, and college and university experts. Members of the Solutions Network number more than 700, many of whom are called upon multiple times a year, creating a powerful and comprehensive support program for clients.



#### COLLEGE AND UNIVERSITY RESOURCES -

We tap into the strength of Pennsylvania's colleges and universities, whose faculty and students work directly with many of our clients. Ben Franklin provides an essential link between client companies and the wealth of knowledge, equipment, facilities, and human resources in the Commonwealth's higher education institutions.

**INFRASTRUCTURE** – BFTP/NEP staff partner with other economic development organizations to create and develop a comprehensive support system for early-stage technology-based companies and established manufacturers throughout northeastern Pennsylvania. For example, we apply more than 35 years of business incubation expertise in leading the 13-member Ben Franklin Business Incubator Network. Business incubation provides significant support to young firms as they launch.

## STATE FUNDING

This year, the Ben Franklin Technology Partners of Northeastern Pennsylvania joined with our three colleague Ben Franklin centers in an effort to increase state investments in the Ben Franklin program. Pennsylvania's total current funding for the Ben Franklin Technology Development Authority Fund in the 2019-20 fiscal year is \$14.5 million. A new fiscal year begins July 1, 2020.

At the current funding level, and because of the competitive nature of state investments in innovation, Ben Franklin recently has been unable to invest in some deserving companies. Additional investments will allow us to capture these opportunities and support more promising companies that have strong potential to create highly paid, sustainable jobs. We want to leverage our current \$3.9-to-\$1 return on investment to increase new revenue generated for the Commonwealth.

Since inception, Ben Franklin Technology Partners statewide has boosted the state economy by more than \$25 billion, helping to generate 148,000 jobs through investments in client firms and spinoff companies in Pennsylvania. That's why Ben Franklin is one of the most widely known and emulated tech-based economic development programs in the nation. Ben Franklin stands poised to efficiently and effectively increase Pennsylvania's investments in innovation to the great benefit of the Commonwealth.

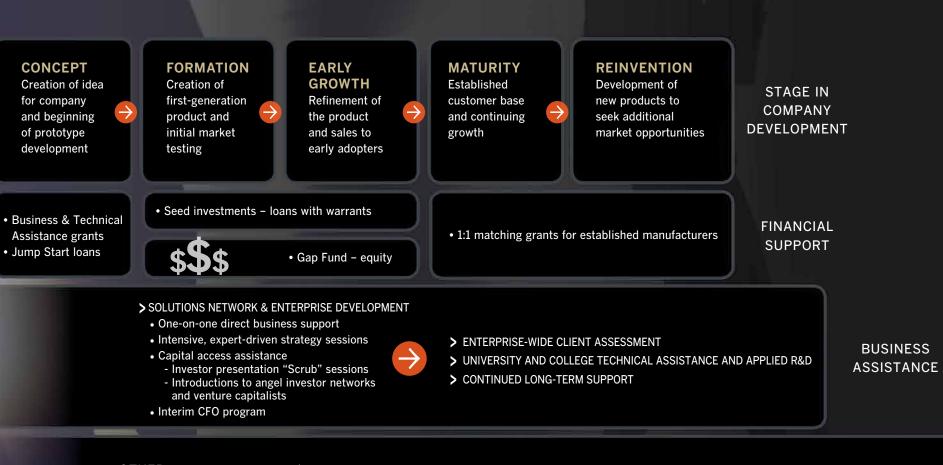
We appreciate the state's support and look forward to continuing to work with the administration and other elected leaders to ensure Pennsylvania remains the gold standard for high-tech investment and development. Please join us in supporting increased investments in Ben Franklin Technology Partners after the Governor's 2020-21 budget is unveiled in February and then debated by the General Assembly through June.

#### WHAT INCREASED STATE INVESTMENTS IN THE BEN FRANKLIN TECHNOLOGY PARTNERS COULD LOOK LIKE OVER FIVE YEARS STATEWIDE:

- 677 MORE COMPANIES RECEIVING INVESTMENT
- \$93.8 MILLION MORE IN BEN FRANKLIN INVESTMENT
- \$863 MILLION MORE IN LEVERAGE/FOLLOW-ON FUNDING
- 4.821 MORE JOBS CREATED
- **44,671** MORE JOBS RETAINED
- 3,490 MORE COMPANIES ASSISTED

## **BFTP: SUPPORTING CLIENTS THROUGHOUT THEIR DEVELOPMENT**

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OTHER BEN FRANKLIN TECHNOLOGY PARTNERS OF NORTHEASTERN PA INITIATIVES

- > BEN FRANKLIN BUSINESS INCUBATOR NETWORK
- 13 member incubators
- BFTP owns and manages Ben Franklin TechVentures and the Bloomsburg Regional Technology Center.
- > BEN FRANKLIN VENTURE IDOL introducing clients to potential investors
- > BEN FRANKLIN iXCHANGE premier regional executive networking event
  - > BETHLEHEM TECHNOLOGY CENTERS I AND II
  - > COLLEGE AND UNIVERSITY CENTERS OF EXCELLENCE
  - > MEDICAL DEVICE GROUP

# COMPANY INVESTMENTS

TO BUILD THE REGIONAL TECHNOLOGY ECONOMY. the Ben Franklin Technology Partners of Northeastern Pennsylvania invests in companies through funding provided by the Pennsylvania Department of Community and Economic Development. Investments in clients are recommended to the BFTP/NEP Board after thorough vetting by the Ben Franklin portfolio team.

The very competitive selection process identifies those companies that show the greatest potential for creating or retaining highly paid, sustainable jobs; introducing novel products or processes; and filling a viable market niche. Ben Franklin works with these most promising ventures on an enterprise-wide basis to enhance their entire way of doing business.

The BFTP/NEP Board of Directors approved the following investments in 2018-19.



## CHALLENGE GRANT INVESTMENTS

## ABEC. INC.

Bethlehem University Partner: Lehigh University's Enterprise Systems Center

Review all aspects of ABEC's inventory management practices and implement a materials replenishment strategy. ABEC manufactures bio-reactor equipment that biopharmaceutical companies use in drug development work.

#### BFTP Investment: \$24,000 Total Project Budget: \$82,243

#### ADELPHIA SEAFOOD

West Lawn University Partner: Lehigh University's Center for Supply Chain Research

Complete facility improvements in the production and packaging areas at this processor, packager, and distributor of fresh and frozen seafood to modernize and increase efficiency. Customers are grocery stores and other retailers, restaurants, foodservice companies, and direct consumers.

#### BFTP Investment: \$7,000 Total Project Budget: \$44,943

#### B. BRAUN MEDICAL, INC.

Allentown University Partner: Lehigh University's Enterprise Systems Center

Complete development of a decision support tool that addresses and analyzes alternatives to assist in optimizing B. Braun's fluids products supply chain network. B. Braun manufactures and supplies disposable medical devices and provides medical services products worldwide.

#### BFTP Investment: \$23,000 Total Project Budget: \$70,000

#### BEARING AND DRIVE SOLUTIONS

Reading

University Partner: Lehigh University's Center for Supply Chain Research

Implement a new Enterprise Resource Planning system and review of manufacturing processes at this multiservice company to improve system integration and

costing and streamline operations. Bearing and Drive Solutions repairs electric motors, stand-by generators, and welders; provides production machining processes; stocks and sells new electric motors, bearings, and power transmission components; provides electrical and mechanical field service and construction; and sells and services the Trailer Tester product.

#### BFTP Investment: \$25,000 Total Project Budget: \$162,000

#### BLASCHAK COAL CORPORATION Mahanoy City

University Partner: Lehigh University's Energy Research Center

Develop a process to efficiently extract Rare Earth Elements (REE) and Critical Materials/Minerals (CM) from anthracite-based resources at this producer of anthracite coal. REEs and CMs have a wide variety of applications in electronic, optical, and magnetic devices. Currently, China produces nearly all REEs and CMs, and there is great demand for domestic suppliers.

#### BFTP Investment: \$25,000 Total Project Budget: \$92,264

#### BRENNTAG NORTHEAST. INC. Reading

University Partner: Lehigh University's Enterprise Systems Center

Improve warehouse and operating efficiencies at the Reading plant. Brenntag manufactures custom-made distribution solutions for industrial and specialty chemicals. The company provides specific application technology, extensive technical support, and value-added services, including just-in-time delivery, product mixing, formulation, repackaging, inventory management, and drum return handling. With more than 10,000 products and a comprehensive supplier network, Brenntag serves 195,000 customers globally.

#### BFTP Investment: \$25,000 Total Project Budget: \$91,750

#### C.F. MARTIN & COMPANY, INC.

Nazareth University Partner: Lehigh University's Enterprise Systems Center

Improve the accuracy of sales forecasting by applying advanced analytics to internal sales data and integrating external econometric, manufacturing, and government research. C.F. Martin designs and manufactures premium stringed musical instruments and musical instrument strings. Enhanced demand forecasting will lead to increased sales and improved operational planning.

#### CONNEXICORE, LLC Milford

#### BFTP Investment: \$100.000 Total Project Budget: \$614.000

Hamburg

#### BFTP Investment: \$16,000 Total Project Budget: \$58,000

## EAST COAST EBOSION CONTROL

Bernville Systems Center

#### BFTP Investment: \$25,000 Total Project Budget: \$111,650

Support strategic marketing and expand sales efforts while growing an elite national network of licensed remote drone pilots. Using its exclusive cloud-based Softwareas-a-Service flight management and analysis platform, ConnexiCore's turnkey approach manages the entire process, from aerial telepresence and data collection, to image and video analysis, to extracting insights from that data, to delivering measurable and actionable tasks to support decision making for industry. ConnexiCore helps clients leverage drone-based aerial data to create efficiencies that save time and money.

#### COUGLE'S RECYCLING, INC.

University Partner: Northampton Community College's Emerging Technology Applications Center

Develop a technical and economic analysis of various process methodologies to convert waste plastic to hydrocarbon oil at this post-consumer and postindustrial recycler. There is a growing problem with the environmentally conscious handling of recyclable and non-recyclable plastics. This issue has been exacerbated by the limited demand in domestic and foreign markets. Cougle's seeks an efficient and responsible method to manage the waste stream.

University Partner: Lehigh University's Enterprise

Improve back-end processes to enhance customer delivery performance, reduce cost-of-goods sold, increase efficiency,

and maximize production capacity at this manufacturer of erosion control products, turf reinforcement mats, and hydro-mulches for the construction industry. East Coast Erosion is one of the largest producers of erosion blankets and other erosion products in the U.S. This upgrade will provide a competitive advantage and facilitate continued growth.

#### BFTP Investment: \$25,000 Total Project Budget: \$218,238

#### EFFORT FOUNDRY, INC.

University Partner: Lehigh University's Enterprise Systems Center

Implement improved production methods and product tracking capabilities at this supplier of high-integrity steel castings for the pump, power generation, and military industries. These technology upgrades will shorten lead times and reduce costs.

#### BFTP Investment: \$25,000 Total Project Budget: \$95,719

#### ETHNIC BEAUTY STORE, LLC East Stroudsburg

Expand retail distribution of Ethnic Beauty Store's proprietary Game Face Grooming product line and boost corresponding marketing efforts. The line is currently comprised of four extra-large-sized wipes, targeted to men who are seeking skin care products that are simple to use. The wipes are fully biodegradable/compostable, have 98.5% natural ingredients, and are made in the U.S.

#### BFTP Investment: \$65,000 Total Project Budget: \$260,000

#### FMI

Allentown

University Partner: Lehigh University's Center for Supply Chain Research

Upgrade FMI's Enterprise Resource Planning system to accommodate growth so the company can operate more efficiently and serve larger customers. FMI provides contract manufacturing for a wide range of clients in the skin care, personal care, hair care, and pet care markets. Its materials are sold throughout the world and comprise products in most major domestic retailers.

BFTP Investment: \$50,000 Total Project Budget: \$176,000



#### FRESHPET. INC.

Bethlehem University Partner: Lehigh University's Enterprise Systems Center

Complete revisions of standard operating procedures and training manuals and apply advanced analytical techniques for correlating customer data with production information in order to improve product and customer satisfaction. Freshpet has a proprietary process for manufacturing food for dogs and cats, and the products are all natural and refrigerated.

#### BFTP Investment: \$50,000 Total Project Budget: \$178,031

#### HERITAGE SIGNS & DISPLAY, INC.

Nesauehoning

University Partner: Lehigh University's Enterprise Systems Center

Design a new, innovative sign product and conduct industrial engineering work to increase manufacturing efficiency. Heritage Sign & Display is a full-service Pointof-Purchase (POP) display supplier serving high-profile retail brands worldwide. The company leverages a line of in-house POP display design, development, and production capabilities to enhance clients' messaging and merchandising.

BFTP Investment: \$12,500 Total Project Budget: \$49,665

#### HEUDIA HEALTH. LLC

East Stroudsburg University Innovation Center East Stroudsburg

Expand business development initiatives, complete software enhancements, and optimize inbound sales processes for multiple markets. Heudia Health is a technology-driven healthcare company that empowers individuals to live healthier, more productive lives using a cloud-based, network-forming framework designed to connect low-income individuals with the optimum set of attainable health, social service, education, and economic services.

#### BFTP Investment: \$50,000 Total Project Budget: \$290,000

#### HEYCO METALS, INC.

Reading University Partner: Lehigh University's Center for Supply Chain Research

Analyze business processes and requirements and then select and implement a new Enterprise Resource Planning system. Heyco Metals is a precision mill that produces copper and copper alloy coil and stainless steel strip to exacting specifications, primarily for electronic connectors and consumer electronics.

BFTP Investment: \$43,750 Total Project Budget: \$403,850



#### HOOTBOARD

Ben Franklin TechVentures. Bethlehem

Complete efforts to support customer acquisition through inbound marketing and value-added reseller partner development. HootBoard provides interactive digital kiosks that deliver a concierge-like service to clients of hotels, airports, and other publicly visited spaces through its Software-as-a-Service platform. The kiosks are significantly less expensive to deploy compared to custom kiosks and can be set up in minutes. Since they are cloud-based, guests receive news and other content in real time and can "take the content with them" on their smartphones.

#### BFTP Investment: \$100.000 Total Project Budget: \$215.000

#### JED POOL TOOLS, INC.

Scranton University Partner: Lehigh University's Enterprise Systems Center

Further develop JED's sales, operations planning, and continuous improvement processes to enhance efficiency, productivity, and flexibility. JED Pool Tools manufactures pool and spa maintenance equipment and provides plastic fabrication toll manufacturing through its custom injection molding division, Northeastern Plastics. As the only domestic producer of its line, JED is vertically integrating to address difficult international competition and promote reshoring initiatives.

#### BFTP Investment: \$25,000 Total Project Budget: \$141,050

#### LAMTEC CORPORATION

Mt. Bethel University Partner: Lehigh University's Enterprise Systems Center

Complete the design of a new material handling system and improve the company's manufacturing changeover process. Lamtec is a global supplier of insulation vapor retarders and facings to leading manufacturers, laminators, and fabricators of fiberglass, rock wool, foam board, and tape.

BFTP Investment: \$44,000 Total Project Budget: \$233,600



#### MED-CON TECHNOLOGIES. LLC

Ben Franklin TechVentures. Bethlehem

Begin commercializing a digital mobile solution for increasing patient adherence to medication and enhancing clinical oversight, particularly in pharmaceutical clinical trials and consumer product studies. Compliance is critical to the accuracy of clinical trials that determine drug safety and efficacy, and trials are required by the U.S. Food and Drug Administration for commercialization. The new web-based digital solution will complement Med-Con's patented tab-based label solution that has been successfully implemented in clinical trials in more than 30 countries.

#### BFTP Investment: \$100,000 Total Project Budget: \$200,000

#### MISCO PRODUCTS CORPORATION

Reading University Partner: Lehigh University's Center for Supply Chain Research

Evaluate the current manufacturing process, office area, and warehouse operations to develop a facility master plan for projected space requirements that will handle current and future needs for the next five years. Misco Products manufactures cleaning and maintenance chemicals for the industrial, foodservice, healthcare, and institutional markets.

BFTP Investment: \$25,000 Total Project Budget: \$132,000

Reading Supply Chain Research

Support the company with process enhancements to improve efficiencies. M.J. Reider is a private contract laboratory that provides analytic testing support for drinking water, non-potable water, and solid or chemical matter. The firm is growing due to an increased emphasis on monitoring drinking water.

Wilkes-Barre

#### BFTP Investment: \$14,150 Total Project Budget: \$36,600

#### MT. EVERETTS FROZEN CREATIONS

Wilkes-Barre University Partner: Wilkes University

Complete the design and layout of new manufacturing space for the production of proprietary new Italian ice, ice cream, and other frozen desserts. The design plan will address current and future capacity requirements.

#### BFTP Investment: \$15,000 Total Project Budget: \$108,944

#### MXTR AUTOMATION Williamsport

Complete enhancements to MXTR's software platform. scale the offering, and improve sales at this producer of software tools for marketing automation. MXTR Automation's platform integrates clients' marketing automation processes, including emails, social media, and website content posting

#### M.J. REIDER ASSOCIATES. INC.

University Partner: Lehigh University's Center for

#### BFTP Investment: \$17,600 Total Project Budget: \$98,981

#### MOUNTAIN PRODUCTIONS, INC.

#### University Partner: Wilkes University

Design and implement an automated wash system for flooring panels. Mountain Productions is the largest staging and event production company in North America, having supported thousands of events. The temporary floor panels frequently used as infrastructure at these events, often numbering in the hundreds or even thousands, currently must be hand washed. This investment will provide an automated pressure wash system for the flooring that will allow the company to better utilize its workforce.

with custom pre-programmed solutions. The process enables MXTR's enterprise and franchisor clients to implement a consistent lead-development and lead-nurturing program throughout all their locations.

#### BFTP Investment: \$100,000 Total Project Budget: \$247,000

#### PENN DAIRY, LLC Winfield

University Partner: Bloomsburg University

Complete a marketing strategy and develop messaging for Penn Dairy. Penn Dairy utilizes a combination of traditional and innovative methods to produce award-winning cheeses, yogurt, and other value-added dairy products that are high-quality, organic, Non-GMO Project Verified, and use locally sourced ingredients in support of small dairy farmers. Many consumers today, especially millennials, seek cleaner ingredients in their food and are focused on alleviating food waste, both of which are key elements of Penn Dairy's mission. The firm works with private-label customers and partners in co-packing.

#### BFTP Investment: \$22,200 Total Project Budget: \$44,400

#### PHYTOGENX, INC.

Morgantown University Partner: Lehigh University's Enterprise Systems Center

Select and implement an Enterprise Resource Planning system at this contract manufacturer for the beauty and skin care industry. The system will support major company growth, including larger-batch production levels and improved manufacturing efficiencies that greatly enhance throughput.

BFTP Investment: \$25,000 Total Project Budget: \$219,227

#### PMA-13, INC.

Allentown University Partner: Lehigh University's Center for Supply Chain Research

Select a new Enterprise Resource Planning system for this producer of signage for government organizations, hospitals, and companies. The new system will streamline and simplify processes to accommodate anticipated growth.

BFTP Investment: \$25,000 Total Project Budget: \$170,000

#### POLYTEK DEVELOPMENT CORP.

Easton

University Partner: Lehigh University's Enterprise Systems Center

Optimize space utilization for this manufacturer of liquid rubbers and casting resins based on specialty polymers, including polyurethane, silicone, and epoxy chemistries. The work will increase throughput, improve efficiency and control of yield, and enhance distribution functions to address continued growth.

#### BFTP Investment: \$25,000 Total Project Budget: \$54,404

#### PRIZER-PAINTER STOVE WORKS, INC. Blandon

University Partner: Lehigh University's Center for Supply Chain Research

Complete improvements in the firm's Enterprise Resource Planning system to accommodate growth and maximize efficiency at this manufacturer of high-end residential kitchen appliances for the brand BlueStar and Big Chill. Innovation and customization of products is one of Prizer-Painter's distinctive competencies and requires effective supply chain management.

#### BFTP Investment: \$17,600 Total Project Budget: \$123,891

Continued

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#### REA.DEEMING BEAUTY, INC.

Bethlehem University Partner: Lehigh University's Enterprise Systems Center

Continue to implement improved operational processes at this manufacturer of the patented, award-winning, elliptical-shaped beautyblender<sup>®</sup> makeup applicator. Rea.deeming supplies high-quality products for the beauty, professional, and retail markets. This work will allow the company to expand its product line and leverage its Enterprise Resource Planning system to optimize the supply chain and enhance its ability to meet increases in consumer demand.

#### BFTP Investment: \$25,000 Total Project Budget: \$70,000

#### REITNOUER, INC.

Birdsboro

12

University Partner: Lehigh University's Center for Supply Chain Research

Complete planning and development of a new facility for this manufacturer of aluminum flatbed and drop deck trailers. Reitnouer utilizes an innovative approach in building the structures that improves product strength and durability. The firm has been a leader in the industry for more than 20 years. Optimizing processes and production in a single facility will support company growth.

#### BFTP Investment: \$25,000 Total Project Budget: \$244,264

#### ROCKET CLOUD, INC.

Ben Franklin TechVentures Bethlehem

Continue to improve the technology platform and implement a new marketing and sales strategy for this software platform interface for the building materials supply industry. The company provides innovative cloud- and machine-learningbased software solutions to streamline the supply chain. It allows traditional wholesalers of equipment and supplies to supplement their physical locations with third-party ecommerce channels, such as Amazon, eBay, Jet.com, and Walmart. Easy online access through e-commerce sites will increase sales.

BFTP Investment: \$200,000 Total Project Budget: \$435,000

#### SKILLION, INC.

Ben Franklin TechVentures Bethlehem

Complete development of Skillion's mobile app and Internet of Things (IoT) device for remotely monitoring and controlling micro-mobility products such as electronic bikes (e-bikes) to provide safety, prevent theft, and/or manage rentals. Both the American and European micromobility markets are expected to grow significantly over the next five years, particularly in urban centers, creating the need for technology to support the sector.

#### BFTP Investment: \$140,000 Total Project Budget: \$523,460

#### SOLO LABORATORIES, INC.

Kutztown University Partner: Lehigh University's Center for Supply Chain Research

Increase capacity in the current facility and implement process improvements and guality measures to improve and grow this manufacturer of custom prescription orthotics and foot and ankle braces.

#### BFTP Investment: \$44,500 Total Project Budget: \$244,305

#### STRAIGHT ARROW PRODUCTS, INC. Bethlehem

University Partner: Lehigh University's Center for Supply Chain Research

Select and implement a warehouse management system at this manufacturer of exclusive hair and skin products for the equestrian and personal care markets, with brands including Mane 'n Tail. Hoofmaker, and Mineral Ice, as well as a new brand, Cowboy Magic. The work will help the company optimize its newest facility in Forks Township.

#### BFTP Investment: \$25,000 Total Project Budget: \$145,000

#### SUMMIT UTILITY STRUCTURES. LLC

West Hazleton

University Partner: Lehigh University's Center for Supply Chain Research

Implement an Enterprise Resource Planning software solution at this manufacturer of tubular poles for use in the utility. lighting, transportation, and communication sectors to improve processes and costing and streamline operations.

Summit Utility Structures is becoming an industry leader in the production of high-voltage power transmission poles and cellular communication poles, positioning the company strongly with continued growth in these industries.

BFTP Investment: \$18,250 Total Project Budget: \$96.500

#### TOWER PRODUCTS

Palmer

University Partner: Lehigh University's Enterprise Systems Center

Complete implementation of a new Enterprise Resource Planning system to meet customer requirements more efficiently at this manufacturer of environmentally sensitive offset and flexographic pressroom chemistry products.

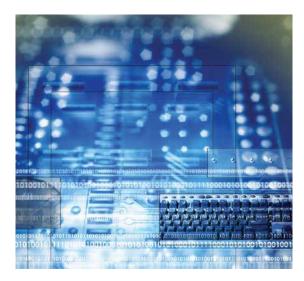
#### BFTP Investment: \$50,000 Total Project Budget: \$322,000

#### UNITED GILSONITE LABORATORIES Scranton

University Partner: Wilkes University

Complete process improvements at this producer of innovative wood and masonry finishing products. United Gilsonite Laboratories manufactures industry-leading masonry waterproofing products and wood stains that are used in homes and other buildings.

#### BFTP Investment: \$25,000 Total Project Budget: \$90,000



#### UNIVERSAL CROSS CONNECTION CONTROL Ben Franklin TechVentures. Bethlehem

#### BFTP Investment: \$50,000 Total Project Budget: \$179,500

Palmerton

Complete R&D work to develop aluminum alloy powders for new applications at this producer of metal powders. U.S. Metal Powders, Inc. is well known for its product guality and diversity, and is optimizing its high-strength alloy powder portfolio to expand its marketability and gain a competitive edge in additive manufacturing.

Bethlehem

BFTP Investment: \$25,000 Total Project Budget: \$182,116

Complete software enhancements and increase sales and customer support for this developer of a softwareenabled, automated, cross-connection control administration for water utilities. Many of the 160,000 U.S. water providers face numerous physical infrastructure deficiencies due to antiquated systems or software, including cross-connection control and backflow prevention problems. Circumstances such as firefighting, water main breaks, and power failures can cause polluted or contaminated water to backflow into the drinking water supply, creating health and safety issues. This can cause expensive repairs and/or lead to "boil water" warnings being issued in communities. UCCC's products allow water providers to protect the water supply and remain in compliance with regulations while remaining cost neutral to the water provider.

#### U.S. METAL POWDERS, INC.

University Partner: Lehigh University's Enterprise Systems Center

BFTP Investment: \$10.000 Total Project Budget: \$65.944

#### VASTEX INTERNATIONAL. INC.

University Partner: Lehigh University's Enterprise Systems Center

Select a new Enterprise Resource Planning system for this manufacturer of precision screen printing machinery, primarily for the apparel industry. The system will improve the company's top-line growth by enhancing customer service and growing its customer base.

#### BUSINESS AND TECHNICAL ASSISTANCE INVESTMENTS

provide early funding for specific projects that are crucial to a company's development or operations.

#### BRD NOISE AND VIBRATION CONTROL. INC.

Wind Gap

Increase efficiency of design, production, and bidding processes at this designer and manufacturer of materials for noise and vibration control in demanding commercial applications.

#### CLICK-VIDEO. LLC

The Scranton Enterprise Center, Scranton

Deliver business assistance to this provider of interactive video for companies.

#### GUIDE

The Scranton Enterprise Center, Scranton

Deliver business assistance to this developer of an application that utilizes proven psychological principles, innovative technology, and relevant expert resources to improve users' lives.

#### HEUDIA HEALTH. LLC

ESU Innovation Center. East Stroudsburg

Provide strategic financial planning to this producer of a software platform that increases the efficiency of delivering healthcare into a given community.

#### HOOTBOARD

Ben Franklin TechVentures. Bethlehem

Deliver strategic planning support for sales and marketing to this producer of interactive digital kiosks that provide a concierge-like service to clients of hotels, airports, and other publicly visited spaces.

#### MDS LINK, INC.

Ben Franklin TechVentures, Bethlehem

Provide QuickBooks<sup>™</sup> assistance to this inexpensive and patent-pending solution that significantly increases bandwidth in the transport of data over existing coax cable without fishing new fiber lines through buildings.

#### MYSTIC MOUNTAINTOP PRODUCTIONS. LLC

Kunkletown

Provide QuickBooks assistance to this producer of proprietary lighting systems for small venues, such as auditoriums. churches, and nightclubs.

#### NEW HORIZON BIOTECH. INC.

Ben Franklin TechVentures. Bethlehem

Develop a market outreach strategy for this designer and producer of an innovative system for microbial fermentation.

#### OPHIDION

Ben Franklin TechVentures. Bethlehem

Provide support for the preparation of a National Institutes of Health grant to this developer of a novel blood-brain-barriercrossing compound for the treatment of Huntington's disease.

#### PAYROLLMART

Ben Franklin TechVentures. Bethlehem

Provide outbound sales program support to this producer of a cloud-based platform that automates the process of pricing and quoting for payroll and human resources services firms.

#### SELECT PRODUCT HOLDINGS, LLC

Vandling

Improve scheduling and inventory systems at this manufacturer of paper products, including paper towels, napkins, and facial and bathroom tissue.

#### SIGNALLAMP HEALTH, LLC

Scranton

Deliver vendor management support and Virtual Desktop Infrastructure implementation at this IT-enabled care management provider that allows doctors to provide a value-added service to more patients, generate new revenue, and achieve better health outcomes.

#### WEBCEMETERIES.COM

#### Kutztown

Support business strategy development at this provider of electronically accessible cemetery burial records, GPS navigation of cemeteries, branded mobile applications for cemeteries, and e-commerce platforms for funeral homes.

#### ZUKAY LIVE FOODS. LLC Elverson

Establish processes for growth at this producer of raw, probiotic, and vegan condiments and beverages.

# LEVERAGING SUCCESS

# BUSINESS INCUBATOR NETWORK

BUSINESS INCUBATION PROVIDES A VENUE, SETTING, AND CULTURE that have become key components of the entrepreneurial and technology ecosystem in northeastern Pennsylvania. BFTP/NEP owns and manages both Ben Franklin TechVentures and the Bloomsburg Regional Technology Center.

With 35 years owning and managing its own incubator, BFTP/NEP was one of the pioneers of business incubation in the nation. Ben Franklin's experience has been recognized with Ben Franklin TechVentures winning the International Business Innovation Association (InBIA) Incubator of the Year award on two occasions.

The reduced operating costs of starting a company in a business incubator are typically what draw early-stage companies to us. But the business development assistance and sharing of best practices among tenants are often even more important. Business incubators provide vital support to entrepreneurs and early-stage firms at their most vulnerable times and are often pivotal to their survival and prosperity.

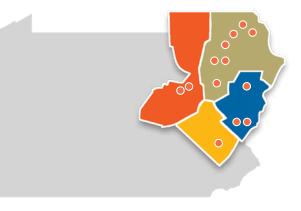
In the early 1990s, BFTP/NEP developed and seed funded the Ben Franklin Business Incubator Network. The network brings together incubator managers in northeastern Pennsylvania to exchange ideas and information, work collaboratively, and share guidelines that are in accordance with InBIA standards. Through this network, we leverage our incubator experience throughout northeastern Pennsylvania.

The Ben Franklin Business Incubator Network is 13 members strong and one of the nation's largest incubator networks. Members of the Ben Franklin Business Incubator Network fuel innovation, catalyze the regional technology economy, and create the jobs of the future.

#### Ben Franklin Business Incubator Network:

- **BEN FRANKLIN TECHVENTURES**, Bethlehem
- THE BLOOMSBURG REGIONAL TECHNOLOGY CENTER, Bloomsburg
- BRIDGEWORKS ENTERPRISE CENTER, Allentown
- CARBONDALE TECHNOLOGY TRANSFER CENTER, Carbondale
- EAST STROUDSBURG UNIVERSITY INNOVATION CENTER, East Stroudsburg
- THE GREATER HAZLETON CAN BE, West Hazleton
- THE INNOVATION CENTER @ WILKES-BARRE, Wilkes-Barre
- JUMP START INCUBATOR, Reading
- ALLAN P. KIRBY ENTERPRISE CENTER AT WILKES UNIVERSITY, Wilkes-Barre

- THE SCRANTON ENTERPRISE CENTER, Scranton
- **STARTUPLEWISBURG**, Lewisburg
- THE STOURBRIDGE INCUBATOR, Honesdale
- THE TEKRIDGE CENTER, Jessup



BFTP/NEP LAUNCHED THE BEN FRANKLIN BUSINESS INCUBATOR AT LEHIGH UNIVERSITY IN BETHLEHEM soon after the statewide Ben Franklin program began in 1983. The location on a major university research campus allows resident companies ready access to the equipment, faculty, and students at Lehigh, which complement Ben Franklin's in-house expertise and network of experts and other resources well.

In 2007, BFTP/NEP relocated the incubator program across the street on Lehigh's campus to Ben Franklin TechVentures, a 62,000-squarefoot former Bethlehem Steel laboratory, tripling available space. Ben Franklin TechVentures<sup>2</sup>, which opened in October 2011, was a major expansion to the original facility that increased the total space to 109,000 square feet. Ben Franklin TechVentures<sup>2</sup> is LEED Gold certified.

To address continuing demand, BFTP/NEP again expanded and opened TechVentures West Wing in autumn of 2017. This 20,000square-foot addition to the business incubator provides additional, much-needed office and meeting spaces. TechVentures now has a total of 129,000 square feet of space for companies to start and grow.

A total of 44 firms called Ben Franklin TechVentures home in 2018-19, employing as many as 170 people. Ben Franklin continues to build on its history as a Job Creation Factory by accommodating accelerating needs for incubator space that fuels economic growth.

Ben Franklin TechVentures<sup>2</sup> is LEED GOLD CERTIFIED



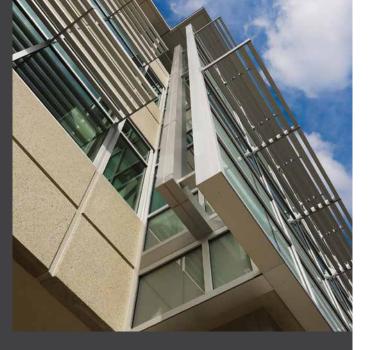
"Rocket Cloud unlocks eCommerce for the industrial supply chain, allowing customers to see 10x the margins they would typically receive in their traditional retail businesses. Ben Franklin has supported us as we developed our technology, in providing incubator office space, and by offering tremendous networking opportunities."

ZEIAD HUSSEIN, CHIEF REVENUE OFFICER Rocket Cloud, Ben Franklin TechVentures, Bethlehem









"Ben Franklin has enabled us to advance our Trojan Horse blood-brain barrier technology that optimizes the delivery of central nervous system therapeutics to targeted sites in the brain, to treat patients with Huntington's disease, for example."

DR. JULIE MIWA. PRESIDENT AND CSO Ophidion, Ben Franklin TechVentures, Bethlehem



## **CENTERS** OF EXCELLENCE

Part of Ben Franklin's mission is to promote an innovative community-wide infrastructure that fosters a favorable business environment for high-growth companies. Pennsylvania's colleges and universities are among the state's strongest assets.

College- and university-based Centers of Excellence allow Ben Franklin

Technology Partners to leverage the excellence of these schools to support Ben Franklin's early-stage and established manufacturer clients. These Centers technologies that have commercial potential and allow manufacturers



## PENNSYLVANIA'S **COLLEGES** AND **UNIVERSITIES** inspire and nurture ARE AMONG THE STATE'S STRONGEST ASSETS.

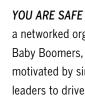
to succeed internationally by applying technology to competitive advantage.

BFTP/NEP frequently works with regional college and university Centers of Excellence to support clients and has invested in several of these centers when they were initially being developed.

- Center for Photonics and Nanoelectronics, Lehigh University, Bethlehem
- Center for Supply Chain Research, Lehigh University, Bethlehem
- Emerging Technology Applications Center, Northampton Community College, Bethlehem
- Energy Research Center, Lehigh University, Bethlehem
- Enterprise Systems Center, Lehigh University, Bethlehem
- Plastics Innovation and Resource Center. Pennsylvania College of Technology, Williamsport

# ixchange

Keynote speaker Seth Mattison presented "The War at Work," which addressed the opportunities and challenges of having five generations in today's workplace.



Seth Mattison, Ben Franklin Technology Partners' iXchange keynote speaker, addressed the challenging work of bringing together disparate generations to achieve organizational goals. He said leaders must develop and maintain a work environment in which freedom, trust, and experimentation are not only embraced, but encouraged. For future-focused organizations to succeed in the new age of the networks, a bold approach to leadership is needed. BFTP/NEP hosted its annual iXchange at the Zoellner Arts Center at Lehigh University in Bethlehem on May 21, 2019. Hundreds of technology entrepreneurs, business people, venture capitalists, economic developers, political leaders, and regional influencers from Ben Franklin's 21-county service area attended. The iXchange included two executive networking sessions, the keynote by Mattison, a speaker who has been called "one of the most dynamic young speakers today," and the presentation of six Innovation Awards.

theme of "The War at Work," of wearing small pins that

YOU ARE SAFE IS THE MESSAGE OF A HIERARCHICAL ORGANIZATIONAL STRUCTURE. You are free is the promise of a networked organizational structure. You belong is the key to psychological safety in any organization. Traditionalists, Baby Boomers, GEN X, GEN Y (millennials), and GEN Z (iGen) – five generations are in the workplace today. Each is motivated by similar overarching desires, but each was raised in a different organizational culture. The key for today's leaders to drive top performance across these generations is to tap the best attributes of each structure.

In following with the keynote iXchange guests had the option identified their GEN. "We have the most age-diverse workforce in



American history, with five generations at work, represented by the five pins here tonight," said iXchange emcee R. Chadwick Paul, Jr., president and CEO of BFTP/NEP. Paul presented Innovation Awards to six recipients who have achieved business success through Ben Franklin funding and assistance, have helped others to achieve

success, and/or have improved their companies through innovation. Joining him in honoring the winners were BFTP/NEP enterprise developers. "They are our front-line people who identify and work directly with clients to determine their needs, link them with appropriate resources, and, with input from their colleagues, fund them and their work," said Paul. "These individuals are part of the 'secret sauce' that makes Ben Franklin investments far more comprehensive and impactful than the funding alone."

#### The 2019 Ben Franklin Technology Partners of Northeastern Pennsylvania Innovation Awards are:

#### ENTREPRENEURIAL ACHIEVEMENT

The company that best exemplifies the guintessential entrepreneurial spirit: a combination of ingenuity, hard work, and innovation that has resulted in the creation of a successful and growing business venture.

#### WINNER: Dynalene Inc., Whitehall

Dr. Satish Mohapatra, President & CEO, and David Arcury, COO

Dynalene is an established international leader in the development and manufacturing of heat transfer fluids for industries including fuel cells, solar and geothermal energy, HVAC, plastics and chemical manufacturing, electronics, pharmaceuticals, and food. Dynalene was conceived as a result of an R&D collaboration between another Ben Franklin client, Loikits Technologies, and Lehigh University, when founder Dan Loikits saw an opportunity in the low-temperature heat transfer fluid market. Loikits, along with Dr. Satish Mohapatra, launched the Dynalene series of fluids and identified additional applications to capture other markets.

Ben Franklin later invested in the development of new heat transfer fluids for fuel cells and solar power, and the company received more than \$1 million of follow-on funding from the U.S. Department of Energy and a Small Business Innovation Research grant from the National Science Foundation. Dynalene has experienced significant recent growth, increasing revenue 38% over the last three years, occupying three buildings in Whitehall and one in Schnecksville, and employing 21.

#### INCUBATOR GRADUATE

The company that best demonstrates successful Ben Franklin business incubation. The business has been operated skillfully and confidently, meeting all challenges, from the development of the product concept, execution of the business and technical plan, and successful start-up and operation, to graduation from the incubator.

#### WINNER: Forge3. Ltd., Bethlehem Jeff Teschke, Founder & CEO

Forge3 offers the insurance industry's leading website and digital marketing platform, powered by ActiveAgency. This comprehensive, cost-effective platform enables independent



insurance agencies around the world to educate, sell, and service clients in today's always-connected world.

Forge3 Founder Jeff Teschke knows firsthand the many benefits of working within a business incubator. Soon after the company became a TechVentures resident, the company participated in a Ben Franklin Tiger Session, an intensive, enterprise-wide analysis by a team of business experts. The strategic direction and constructive criticism provided to young firms during

these sessions is often pivotal to a firm's success. One of Forge3's expert Tigers was Ben Franklin incubator graduate Ray Glemser, who went on to mentor Teschke as he transitioned Forge3 into the scalable, high-growth company it is today. Graduating from Ben Franklin TechVentures in late 2016, Teschke is now a TechVentures affiliate client, paying it forward by coaching new incubator clients.

#### PRODUCT INNOVATION

The company that best demonstrates the commercialization of a unique, innovative product that creatively and effectively meets a market need.

#### WINNER: Gilson Snow, Inc., Winfield Nicholas Gilson. CEO

Gilson Snow is a snowboard, ski, and apparel manufacturer that designs bases in an innovative and proprietary way to provide an enhanced and unique



"feel" on the mountain. Applying aeronautical engineering concepts, Gilson snowboards and skis have a threedimensional base that is faster, stronger, and more flexible than traditional products, storing more energy for the "pop" that is sought by snowboarders. The company merges the woodworking heritage of rural Pennsylvania with the precision of modern technology, all with a demonstrated commitment to environmental sustainability.

ReddyYeti ranked Gilson as the No. 1 snowboard brand, and Wired ranked it Snowboard Gear of the Year in 2015. The firm has also earned accolades from Snowboard, Outside, and Bloomberg Businessweek.

#### INNOVATIVE APPLICATION OF TECHNOLOGY

The company that strongly demonstrates a "breakthe-mold" approach to integrating new or existing technology into its business.

#### WINNER: TRuCapSol, LLC, Ben Franklin TechVentures, Bethlehem

David A. Brand. CEO. and Jiten Dihora. CTO

TRuCapSol (Time-Release Capsule Solutions) applies a patented materials process to high-value active ingredients to encapsulate them to form micron-sized capsules. These capsules retain the vital properties of the ingredient as the product is used and release it over a duration of time. Unlike conventional capsules, which utilize chemistry that is not environmentally biodegradable, TRuCapSol uses natural materials, making its capsules more environmentally friendly.

The company's initial focus is in fragrances for laundry detergents and fabric softeners, developing encapsulation systems that allow fabrics to retain their fragrance for two weeks instead of two days, and on improving the stability of vitamins. TRuCapSol's materials provide improved effectiveness, reduced waste, and a performance/cost ratio that is better than existing capsules.

#### MANUFACTURING ACHIEVEMENT

The company that best exemplifies achievement in the manufacturing arena, showing a proven track record of success and an unbending commitment to achieving and maintaining excellence in manufacturing.

#### WINNER: Galaxy Mfg. Company, Moosic Lee Batzel. President & CEO

Galaxy Mfg. Company produces innovative, durable brushes for oil and gas pipeline operators and pipeline cleaning service providers. The company developed and commercialized a patented "pencil-end" brush, the key component to pipeline pig brushes that clean and maintain the inside of pipelines.

Ben Franklin made multiple investments in Galaxy to develop specialized machinery to manufacture the brushes for domestic and international customers. The firm also utilized the Ben Franklin Solutions Network for financial expertise and strategic support.

Galaxy is committed to outstanding customer service and boasts an industry-best order-to-delivery turnaround. It continues to grow by diversifying its revenue streams and reducing outsourcing. Galaxy employs 27 and increased revenues 100% over the last three years.

BFTP/NEP renamed the Partnership Award to honor its longest-serving board member, former board chair, and staunch Ben Franklin Technology Partners supporter, Fred Beste, who sadly passed away in 2018. Beste defined the strong vision, dedication, and commitment that is emblematic of the award.

### THE FREDERICK J. BESTE III PARTNERSHIP AWARD

region thrive.

As part of its emphasis on entrepreneurship education, Penn State Berks has invited Regional Manager Connie Faylor to present to undergraduate classes. It established the Fleming Creativity Entrepreneurship and Economic Development Center, offers maker space at its

An organization whose strong vision, dedication, and commitment have helped the Ben Franklin Technology Partners accomplish its goals. This support demonstrates a sincere desire to see the

#### WINNER: Penn State Berks, Reading Dr. R. Keith Hillkirk. Chancellor

Penn State Berks models the productive relationship between higher education institutions and innovative companies that Ben Franklin was created to foster.

PSU Berks has hosted Ben Franklin's regional advisory board and presented on how it supports companies. It also hosted two Ben Franklin Medical Device Group meetings and continues to support this key sector in Berks County.

Penn State Berks LaunchBox, and, through its Learning Factory, has engaged student teams to support several Ben Franklin clients. Penn State Berks has aggressively sought opportunities for faculty, students, and Ben Franklin clients and staff to partner to advance tech-based entrepreneurship to the great benefit of the regional economy.







# VENTUREIDOL

Ben Franklin Venture Idol is a cross between "Shark Tank®" and "American Idol" and illustrates a significant way in which early-stage entrepreneurs seek and obtain seed capital.

competitors were:

- Ophidion, Bethlehem

- studio BE Mindfulness, LLC, Wilkes-Barre

ONE OF THE MOST IMPORTANT WAYS BFTP/NEP IS ABLE TO SUPPLEMENT ITS INVESTMENTS in early-stage firms is by connecting portfolio firms to venture capitalists, angel investors, and other institutional investors. Clients leverage the well-respected Ben Franklin brand to get noticed by follow-on funders.

Apis Innovation, Ben Franklin TechVentures, Bethlehem, won Ben Franklin Venture Idol, hosted by BFTP/NEP on Nov. 6 in the Ben Franklin TechVentures® Innovation Institute. Ben Franklin Venture Idol is a cross between "Shark Tank" and "American Idol" and illustrates a significant way in which early-stage entrepreneurs seek and obtain seed capital.

Apis Innovation develops Internet of Things (IoT) control systems that enable landfills to capture 20% more methane gas from decomposing waste. Globally, methane released from landfills accounts for 65% more greenhouse gas emissions than the entire U.S. transportation industry. The Apis system can increase a typical customer's biogas-to-energy revenue and reduce operations and maintenance costs. The company's vision is to match the sustainability impact of the global electric vehicle market by increasing landfill methane collection by at least 1.67% over the next decade.

Approximately 300 guests attended Venture Idol, which included pre- and post-event executive networking receptions. BFTP/NEP selected seven early-stage company contestants competitively from its portfolio. In addition to Apis, the 2019 Ben Franklin Venture Idol

 American Paper Bag, LLC, Wilkes-Barre • Build My Team, Honesdale PrintElements Corp., Honesdale Skillion, Inc., Bethlehem

Three of the companies, American Paper Bag, Apis Innovation, and Ophidion, earned their way to finalist status in a round of judging in the afternoon prior to the event.

Following a networking session, Ben Franklin Venture Idol began with the keynote panel, "So You Wanna Raise a Seed?" Panelists were Nick Gilson, Gilson Snow; Phil Williams, Enchanted Life and Game Face Grooming; Dr. Katy Worrilow, LifeAire Systems; and Andy Goldberg, Signallamp Health. Liz Sigety, Esq., co-founder of Delaware Crossing Investor Group, moderated.

The three company finalists then pitched their ventures to a new panel of accredited investors and the audience. After short critiques from the investors, the audience members "funded" the companies crowdfunding style, using a voting app produced by Ben Franklin client UBMe. Ben Franklin allocated a total of \$15,000 in prize money among the three finalists based on the audience vote.

The evening's investor panelists were: Jim Alperin, Angel Investor Paul Martino, Bullpen Capital Mark Mitchell, Delaware Crossing Investor Group Doug Petillo, Leading Edge Ventures



BEN FRANKLIN TEAMS WITH ECONOMIC DEVELOPMENT COLLEAGUES TO ADVANCE THE REGION'S BUSINESS/TECHNOLOGY ECOSYSTEM, leveraging our collective efforts so that the combined result is greater than the sum of the parts. For example, BFTP/NEP is participating in the new Made Possible in Lehigh Valley marketing campaign.

Through the perspectives of individuals in the region, the campaign aims to tell stories of distinguished Lehigh Valley companies and organizations, as well as can't-miss places to visit and things to do, embracing all of what is "made possible" in the region. The campaign was launched this year by the Lehigh Valley Economic Development Corporation in partnership with Discover Lehigh Valley<sup>®</sup> and brings together economic development organizations, including the Ben Franklin Technology Partners, area companies, and tourism businesses.

Made Possible in Lehigh Valley is a unified messaging strategy that will maintain and amplify positivity about the region. The result will be the creation and attraction of viable companies in desirable industries, the availability of an educated and talented workforce, the growth of the region as a tourism destination, and sustainable economic growth.









# IMPACTS & FINANCIALS

## STATEWIDE IMPACTS

THE BEN FRANKLIN TECHNOLOGY PARTNERS COMMISSIONED ITS FIFTH CONSECUTIVE FIVE-YEAR, THIRD-PARTY STUDY last year, which evaluated Ben Franklin's impact on the state's economy. The Pennsylvania Economy League and KLIOS Consulting conducted the independent analysis. The report focuses on Ben Franklin's role in providing financial investments and related services to early-stage technology firms and established manufacturers in Pennsylvania.

The study found that Pennsylvania's investment in Ben Franklin Technology Partners statewide from 2012 to 2016 returned \$3.90 in new tax revenue for every \$1 spent. Jobs created by Ben Franklin's clients are in industries that pay an average of \$79,364 annually, which is 52% more than the average non-farm wage in Pennsylvania. The study also concluded that, since 1989, the Ben Franklin statewide network has created 54,000 additional jobs in client firms and has boosted the Pennsylvania economy by \$25 billion.

- BFTP boosted the Pennsylvania economy (Gross State Product) by \$4.1 billion from 2012 through 2016 and by \$25 billion since 1989.
- From 2012 through 2016, the Commonwealth received \$350 million in additional state tax receipts as a direct result of BFTP investments in client firms. Another \$36 million in state tax receipts flowed from related BFTP client services, for a total increase of \$386 million in state revenue due to BFTP.
- New state tax revenue generated because of BFTP represents a 3.9-to-1 payback to the Commonwealth on its \$100 million investment during that period.
- From 2012 through 2016, BFTP generated 4,182 additional jobs in client firms.
- Client revenues, purchasing, and investments ripple throughout the Pennsylvania economy, giving rise to higher employment across the state. From 2012 through 2016, BFTP generated an additional 7,225 jobs beyond those in client firms, for a total of 11.407 jobs in the Commonwealth that otherwise would not have existed.
- Since 1989, BFTP has generated 54,000 jobs in client firms and an additional 94,000 jobs because of increased purchasing and investments by client firms, yielding a total of 148,000 new jobs attributable to BFTP's work.
- Jobs created by Ben Franklin's clients are in industries that pay an average of \$79,364 annually, which is 52% more than the average non-farm wage in Pennsylvania.



## **BROOKINGS INSTITUTION IDEAS FOR** PENNSYLVANIA INNOVATION

Pennsylvania could advance job and economic growth by increasing investments in innovation, according to an independent report by the Brookings Institution's Metropolitan Policy Program released in August 2019. The study looked at spending by state and local governments, as well as businesses and universities.



on research and development and other incentives.

Among the takeaways from the Brookings analysis is that the "winner-take-most" nature of the current tech-driven economy has highlighted what is at stake for states that wish to retain their viability. Innovation has long been a source of economic growth for the most successful states and has only grown more important with rapid technological change. Pennsylvania is engaged in a competition with other U.S. regions and countries around the globe to secure its future economic well-being.

The Commonwealth has historically been an innovation leader, and Pennsylvania has a well-developed and proven technology-based economic development ecosystem that can catalyze these efforts if adequately resourced. The Ben Franklin Technology Development Authority and the Ben Franklin Technology Partners lead in supporting technology-based start-ups and innovation in established manufacturers across the state. Increasing state investments in Ben Franklin will help to address the issues highlighted in the Brookings analysis and ensure Ben Franklin Technology Partners remains one of the most innovative, emulated, and successful state technologybased economic development programs in the nation.

#### BEN FRANKLIN TECHNOLOGY PARTNERS of NORTHEASTERN PENNSYLVANIA

## NORTHEASTERN PA IMPACTS

The Ben Franklin Technology Partners of Northeastern Pennsylvania surveys its client companies on the economic impacts that they accomplish as a direct result of Ben Franklin's investments. BFTP/NEP reports these figures to the Pennsylvania Department of Community and Economic Development.

NEW JOBS CREATED48018,536EXISTING JOBS RETAINED5,48837,328NEW COMPANIES STARTED9520NEW PRODUCTS AND PROCESSES DEVELOPED2021,935COMPANIES ASSISTED3043,411FOLLOW-ON FUNDING\$62.9 MILLION\$1.6 BILLION		2018	CUMULATIVE (since 1983)
NEW COMPANIES STARTED9520NEW PRODUCTS AND PROCESSES DEVELOPED2021,935(since 2007)COMPANIES ASSISTED3043,411	NEW JOBS CREATED	480	18,536
NEW PRODUCTS AND PROCESSES DEVELOPED2021,935(since 2007)3043,411	EXISTING JOBS RETAINED	5,488	37,328
COMPANIES ASSISTED 304 3,411	NEW COMPANIES STARTED	9	520
COMPANIES ASSISTED 304 3,411	NEW PRODUCTS AND PROCESSES DEVELOPED	202	1,935
			(since 2007)
FOLLOW-ON FUNDING \$62.9 MILLION \$1.6 BILLION	COMPANIES ASSISTED	304	3,411
	FOLLOW-ON FUNDING	\$62.9 MILLION	\$1.6 BILLION

## FINANCIAL INFORMATION

#### FISCAL YEAR 2018-19 REVENUE SOURCE

## \$3.5 Million

Pa. Dept. of Community and Economic Development Challenge Grant



# BOARD/STAFF NEWS

## **BOARD CHANGES**

THE BFTP/NEP BOARD OF DIRECTORS ANNOUNCED the appointment of a new chair, a new executive committee member, and three new board members this year.



### Jan Heller Named New Board Chair

Jan S. Heller has served on the BFTP/NEP board for 26 years, as vice chair from 1994 to 1996 and chair from 1996 to 1999. She also led as finance committee chair and on the executive committee. She previously worked as executive vice president

of Wells Fargo Bank, NA and as executive vice president of finance at St. Luke's University Health Network. Heller has a consultancy, Golf Championship Events, LLC.

## Ken Guito Appointed to **Board Executive Committee**

Kenneth P. Guito was appointed to the BFTP/NEP board executive committee. He is the chief operating officer of Biologics Consulting, Inc. and has served on BFTP/NEP Board of Directors since 2012.

## Three New Board Members Appointed

The Ben Franklin Board appointed Robert A. Oster, CPA, retired CEO from Concannon, Miller & Co., Bethlehem, as a director in September 2018. Glen R. Bressner, managing partner of Activate Venture Partners, Bethlehem, and Patrick W. Gaynor, PE, partner/senior structural engineer at Tunstall Engineering Group, Cranberry Township, were appointed directors in February 2019.

## STAFF CHANGES Wayne Barz Promoted to **Chief Investment Officer**

BFTP/NEP promoted Wayne K. Barz to chief investment officer in June 2019. Barz has served as Ben Franklin's manager of entrepreneurial services since 2000, having overseen the expansion of Ben Franklin's incubator facilities from 18,000 square feet to 129,000 square feet.

In his new role as chief investment officer. Barz directs Ben Franklin's Enterprise Development group, which has the primary responsibility for identifying early-stage firm and established manufacturer client investment and support opportunities and managing relationships with each client. Barz also leads the Solutions Network, which has responsibility for identifying, qualifying, and directing Ben Franklin's business and technical advisors, and third-party prospective client reviewers.

#### Anthony Durante Appointed as Manager of Entrepreneurial Support

BFTP/NEP appointed Anthony Durante as BFTP/NEP's manager of entrepreneurial support in July 2019. In this position, Durante manages Ben Franklin TechVentures and develops and directs new incubator programs that provide business support services to resident clients. He advises and coaches prospective clients on their product/service offerings, strategies, and commercialization plans and helps them generate strong proposals and investor presentations.

Before coming to Ben Franklin, Durante was the program manager for the Bridgeworks Enterprise Center, a manufacturing and technology business incubator owned and managed by the Allentown Economic Development Corporation. Bridgeworks is a member of the Ben Franklin Business Incubator Network.

## IN MEMORIAM: FREDERICK J. BESTE III

The longest-serving board member of the Ben Franklin Technology Partners of Northeastern Pennsylvania passed away on Dec. 8, 2018. Frederick J. Beste III, founding partner, president, and CEO of Mid-Atlantic Venture Funds, Bethlehem, served BFTP/NEP for more than 30 years in multiple board roles including several times as chairman.

He was appointed to Pennsylvania's Ben Franklin Technology Development Authority Board and volunteered and advocated tirelessly for BFTP.

During the course of his career, Beste served on the boards of countless companies and advised and worked with thousands of entrepreneurs. He was widely published on the subjects

of venture capital and entrepreneurship and taught and presented extensively on those topics. Beste was chairman of the board of Hawk Mountain Sanctuary. Kempton, Pa., and was a devoted mentor, gardener, reader, communicator, and friend. His support of entrepreneurs will have a lasting impact, and he will be deeply missed.



# BOARDS

#### BOARD OF DIRECTORS

Jan S. Heller Board Chair President, Golf Championships, LLC

Ronald L. Bauer Retired Bosch Rexroth Corp.

Frederick J. Beste III\* CEO of the General Partners Mid-Atlantic Venture Funds

Glen R. Bressner Managing Partner Activate Venture Partners

Patrick W. Gavnor, PE Partner/Senior Structural Engineer Tunstall Engineering Group, LLC

Kenneth P. Guito Chief Operating Officer Biologics Consulting, Inc.

Patricia A. Johnson Vice President for Finance and Administration Lehigh University

Barbara T. Lampe Board Vice Chair Retired

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Peter Molinaro, Jr. Chairman and Chief Executive Officer Adhezion Biomedical. LLC

Robert A. Oster, CPA Retired CEO Concannon, Miller & Co., PC

R. Chadwick Paul. Jr. President and Chief Executive Officer Ben Franklin Technology Partners of NE PA

James J. Peters Chief Operating Officer Rite Aid

Alan J. Snyder, Ph.D. VP and Associate Provost for Research and Graduate Studies Lehigh University

\*Deceased

#### ADVISORY BOARDS **GREATER READING/BERKS AND**

SCHUYLKILL REGION The Honorable David G. Argall State Senator

Jon Balthrop Plant Manager Prizer-Painter Stove Works, Maker of Blue Star

Paige M. Brookins, Ph.D. Assistant Dean, College of Business Kutztown Universitv

Karen A. Campbell, Ph.D. Acting Provost and VP of Academic Affairs Albright College

Robert S. Carl. Jr. Executive Director Schuvlkill Chamber of Commerce

Heather A. Chandler President

Sealstrip Corporation

Michael Duddy Proiect Manager WORLD electronics

Daniel W. Fogarty Chief Operating Officer Berks County Workforce Development Board

Saskia Folev CEO and President RADIUS Corporation

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