“The aim of innovation policies...is to foster the development of technologies that don’t yet exist and whose business models and markets are unknowable. Organizations capable of inventing these technologies must be attracted or built, and the result of their labors must be channeled into economic growth. That means we’re not talking about a process of long-term planning but one of continuous experimentation. Policy makers need to rapidly come up with new initiatives, kill those that don’t work, scale up those that do, and then, as a new industry grows, keep changing the incentives in a co-evolutionary process in order to keep pace with the industry’s dynamic needs and capabilities.”

- The Cardinal Sins of Innovation Policy
By Dan Breznitz Jul 28, 2014, Bloomberg News
At Ben Franklin Technology Partners of Southeastern PA, we are partners with a purpose.
Every day we work towards the singular purpose of leading the region’s technology community to new heights.
This leadership spans a diverse range of emerging technologies:

- Information Technology
- Nanotechnology
- Advanced Manufacturing
- Physical Sciences
- Life Sciences
- Energy
We approach our work as an Innovation Catalyst & Integrator

Seed, Link & Leverage Innovation Assets

Capital

Counsel

Connections

= New Companies
New Products
Jobs
Wealth
And we only reach our potential, when we help promising entrepreneurs with big ideas, reach theirs.
With over $170 million invested, we have seeded more than 1750 successful companies that have created thousands of jobs.

Our goal: to help make the next 30 years for our communities even brighter than the last.
Our local impact on Southeastern PA has been profound and quantifiable.

1,750+ Companies launched since 1982
$5.17B regional output

30,800+ Jobs generated since 1989
$54K average wage
Our Innovative Partnership
Since 1982
Pennsylvania’s Partners to Drive Technology Based Growth

Mission
“...invest in the transformation of the Pennsylvania economy through technology, innovation, & strategic partnerships that foster a favorable business environment for high-growth companies.”
Creating and seeding new laboratories of innovation
Renovated 100 year historic structure at Philadelphia Navy Yard

First on-site innovation & entrepreneurial focused activity

Anchor for Southeastern PA’s energy strategy...led to the creation of Consortium for Building Energy Innovation (CBEI)

Ben Franklin headquarters
30 years of innovation
Innovate in PA

$100M Ben Franklin Technology Partners, three Life Sciences Greenhouses and the Venture Capital investment program.
Key Characteristics of the Bens

- Legislatively authorized: 1982
- Statewide oversight: legislative & administrative; public & private
- Governing guidelines
  - 1:1 match required
- Regional 501c(3) corporations; private boards
- Wide latitude for regional innovation strategies:
  - Regional initiatives: seed, support, convene
  - Company investments & support; investment funds
  - University partnerships & tech transfer/commercialization
  - Corporate open innovation strategies
- Focus on partnerships & collaborative approaches
- Evergreen investment model
Ben has adapted through the years

**PHASE I:** 1982
Advanced Technology Centers; university focus

**PHASE II:** 1988-93
Reauthorized & 501 c-3 BFTCs; company focus

**PHASE III:** 1996-2001
Reauthorized as BFTPs w/BFTDA; 20th anniversary; investor & university partnerships; regional gateway

**PHASE IV:** 2002-13
25th anniversary; growth; energy role; recession

**PHASE V:** current
Leading seed investor nationally; Innovate in PA; private investment partnerships; renewed university & other partnerships
Transforming the state and tens of thousands of lives throughout our history

- **3,500+ Companies started**
- **51,000 Jobs generated since 1989**
- **$6.6B Added to the PA economy from 2007-2011**

**State Return on Investment**

2007-2011

<table>
<thead>
<tr>
<th>Investment</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1</td>
<td>$3.60</td>
</tr>
</tbody>
</table>

Source: Statewide statistics via benfranklin.org
Building a long history of leadership in driving innovation & entrepreneurship

- Presidential Commendation
- Gubernatorial Commendation
- PA Senate Resolution
- Technology-Led Economic Development Award
- Excellence In Economic Development Award
- The Nanotechnology Institute Honorable Mention for Excellence in Economic Development Award
- Technology Commercialization Group finalist, Excellence in Economic Development Award
- RoseAnn B. Rosenthal, Temple League of Entrepreneurial Women Hall of Fame
- Award of Recognition & 20 years of Innovation Award
- Website Awarded Silver at Addy Awards
- Local Venture Impact Award, Life Sciences Awards
- Enterpriser Award, Eastern Technology Council Enterprise Awards
- RoseAnn B. Rosenthal awarded an Honorary PhD in Humane Letters from Philadelphia University
- Innovation Excellence Award
- RoseAnn B. Rosenthal appointed to National Advisory Council on Innovation & Entrepreneurship
- RoseAnn B. Rosenthal, Founders Award
- RoseAnn B. Rosenthal, Champion of Small Business Award by the National Coalition for Capital, 2009
- Innovation Excellence Award
- 20 Years of Success Award
- Microlending Minority Advocate of the Year
- Terry Hicks, Minority Business Leader Award
- RoseAnn B. Rosenthal, Blair Thompson Lifetime Venture Award
- RoseAnn B. Rosenthal, Legend Award
- RoseAnn B. Rosenthal, AWE 2013 Iris Newman Award
- Case Study for Regional Development

RoseAnn B. Rosenthal, Temple League of Entrepreneurial Women Hall of Fame

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Technology Commercialization Group finalist, Excellence in Economic Development Award

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Co-founder, President & CEO, Morphotek, Nicholas Nicolaides, Ph.D.
“Ben Franklin’s involvement was a vote of confidence that drew in a series of local & international angel investors.”

Founder, InfraScan
Baruch Ben Dor, Ph.D.
“The financial & business support from Ben Franklin have been very important… having good professional advice & guidance at the early stages is critical.”

CEO, Health Market Science
Matt Reichert
“Ben Franklin provided us with the tools to drive innovation with our business, which we will keep doing.”

CEO, AboutOne
Joanne Lang
“The Ben Franklin team not only helped me with cash…but they have helped me with PR and introduced me to people that have helped my business in many ways. I am also humbled to be in a [Ben Franklin Success Team] CEO group with some amazing experienced CEOs that always take the time to help me no matter how busy they are.”
Because we don’t succeed unless they do!

**Graphene Frontiers** Awarded $745k NSF Grant for ‘Roll-to-Roll’ Graphene Production

**Aprecia** selects InVentiv to commercialize its 3-D printing tech platform

**Janssen Biotech** Receives FDA Approval for SYLVANT™ (siltuximab) to Treat Multicentric Castleman’s Disease (MCD)

**CoreDial** Helps Partners Increase Profits by Up to 65 Percent Enabling New Revenue through its Innovative Cloud Communications Offerings

**A View From My Seat**: Top 10 Hottest U.S. startup

**Smarter Agent** SaaS company becomes largest provider of mobile real estate apps in residential housing sector

**Ceptaris Therapeutics, Inc.** Receives FDA Approval for VALCHLOR™ (mechlorethamine) Lymphoma Gel

**CenTrak** Ranked Number 129 Fastest Growing Company in North America on Deloitte’s 2013 Technology Fast 500™

**Neat** CEO Awarded E&Y’s Technology Entrepreneur Of The Year 2013

**Intezyne Technologies** Expands Its Oncology Pipeline Through Strategic Acquisition of Niiki Pharma
SUCCESS STORY

Industry:
Cancer Pharmaceuticals

Product:
Valchlor, a mechlorethamine gel used to treat cutaneous T-cell Lymphoma

Founded: 2002

Founder & CEO:
Robert Alonso, Founder; Steve Tullman, CEO

Ben Participation:
$250k investment in 2005.

Growth:
• 3 employees at the time of Ben’s investment;
• Currently 15 employees.

Success:
• In August 2013, Valchlor received FDA approval for use in cutaneous lymphoma patients;
• Acquired by Actelion Ltd., a Swiss pharmaceutical company, in 2013 for $250M up front.
Industry: Web Services

Product: Software allows retailers to cater promotions to each consumer’s demographic

Founded: 2008

Founder & CEO: David Bookspan; David Brussin


Growth:
• 5 employees at the time of Ben’s investment;
• Currently 230+ employees.

Physical Expansion: Headquartered in Conshohocken, PA, with an office in London to serve Europe, the Middle East, and Africa.

Success:
• Company revenues have doubled each year from 2011 to 2013;
• Raised $35.1M follow on investment 2011-2013
Success Story

**Industry:**
Device-Delivered Neurological Pharmaceuticals

**Product:** A patch that delivers sumatriptan through the skin for the treatment of migraines

**Founded:** 2005

**Founder & CEO:**
Jane Hollingsworth, Founder;
Armando Anido, CEO

**Ben Participation:**
$750K invested since 2006.

**Growth:**
- 11 employees at time of Ben’s investment;
- Currently 15 employees.

**Success:**
- Successfully developed Zecuity migraine patch to FDA approval, with patients now benefitting from a fast-acting treatment without the need for needle injection;
- Bought by Teva for $144M for Zecuity and for NuPathe’s other neurological drug programs.
<table>
<thead>
<tr>
<th>Industry:</th>
<th>Ben Participation:</th>
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<tbody>
<tr>
<td>Cancer Pharmaceuticals</td>
<td>$500K invested since 2006.</td>
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</table>

<table>
<thead>
<tr>
<th>Product:</th>
<th>Growth:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various cancer drugs</td>
<td>• 11 employees at the time of Ben’s investment;</td>
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<tr>
<td></td>
<td>• Currently 62 employees.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Founded:</th>
<th>Success:</th>
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<tbody>
<tr>
<td>1998</td>
<td>• Successfully raised $75M in a public offering in 2013;</td>
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<tr>
<td></td>
<td>• Continued drug discovery and development relationships with Temple University;</td>
</tr>
<tr>
<td></td>
<td>• Executed business development deals with larger companies such as with Baxter, for $50M upfront.</td>
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</tbody>
</table>
**Industry:**
Health Food Products

**Products:**
Leafy raw kale and other vegetable chips; dog treats recently introduced

**Founded:** 2009

**Founder & CEO:**
Brad Gruno

**Ben Participation:**
$600K invested since 2012 ($200K VC4BC)

**Growth:**
- 28 employees at time of Ben’s investment;
- **110 employees** as of December 31, 2013.

**Physical Expansion:**
Expanded production facility/office space from 7,000 to 14,000 feet to accommodate increasing sales volume.

**Success:**
- **Revenue growth doubled** from time of Ben’s investment with projections to **triple by 2016**;
- Agreement signed with largest natural foods distributor **serving 27,000 stores**.
Some Lessons Learned

✓ Innovation strategies need to stay close to the ground
✓ Identify and perfect a core, unique, function
✓ Partner where possible and rational
✓ Stay close to core stakeholders
✓ Adopt a business mindset and practices
✓ Embrace change
We are Partners with a Purpose!

Greater Philadelphia STEM
Thank You!

facebook.com/bftp.sep
twitter.com/bftp_sep
www.sep.benfranklin.org