



center for innovation + entrepreneurship

P>TH FORW>RD

**Commercialization of
Technologies Through
Applied Entrepreneurship
Training**

ACTiVATE®

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Achieving the Commercialization of Technology in
Ventures through Applied Training for Entrepreneurs



What is **ACTiVATE**®?

- › Pre-incubation training and **development** program → pipeline builder
- › Structured approach and curriculum for technology **commercialization**
- › **Access** to resources, funders, successful entrepreneurs
- › Growing, national **community**
- › On-going **support**



Diverse participants



Retired
business exec
from large
company

Research scientist
and inventor from
Johns Hopkins



PhD Audiologist
formerly
From the Mayo
Clinic





with a variety of projects



Prototype device from UMB

Inventor out of National Lab



Idea teamed with
research expertise





CAPITALIZING INNOVATION
"I was impressed by the potential I saw," says Appel, here in her stockroom with the Tailwind.

SECOND ACT

► **Kris Appel, 48**

THEN: Government employee

NOW: Medical device maker

BACK IN 2003, while she was a director of internal communications at the National Security Agency, Kris Appel spent six months working at a small technology firm as part of an executive development program. She liked it so much that at the end of it, she says, "I didn't want to go back to NSA." The experience prompted her in 2006 to enroll in a course on becoming a tech entrepreneur.

Researching patents for the class, the Baltimore resident came across a device designed to improve arm function in stroke survivors; the inventors had tested a prototype. Seeing business potential, Appel contacted study participants: "They were effusive." She licensed the patent for \$10,000 (plus royalties) and contracted engineers to create the device, dubbed the Tailwind. She began selling it in 2009 for \$3,000. "The fun," she says, "is creating something from nothing." —JOSH HZART

HOW SHE DID IT

1 By stockpiling cash.

Knowing she wanted to start a business, Appel began saving in 2003. By 2006 she had \$50,000. She used much of it for living costs, to supplement her husband's income.

2 By tapping state programs.

For working capital to manufacture the Tailwind, Appel secured about \$125,000 from two Maryland-sponsored loan programs.

3 By hiring help.

In 2009, she sold the device only to patients who contacted her. With sales of \$300,000, she took home \$75,000, half her prior pay. She's now adding sales reps to help boost revenue.



Impressive outcomes

- 130+ participants
- 200+ technologies from universities and federal labs reviewed
- 40+ Start-up companies
- Creating jobs
- Companies received over \$30M in funding



ENCORE PATH™
Leading to Your Recovery



ARCION
THERAPEUTICS

Key Differentiators

- › Educated, **experienced women**
- › Foundation in **innovation**
- › Focus on **technology commercialization**
- › **Applied** process driving superior outcomes
- › Integrated into the **local community**
- › **Primed for replication**



1,000 Women by 2014

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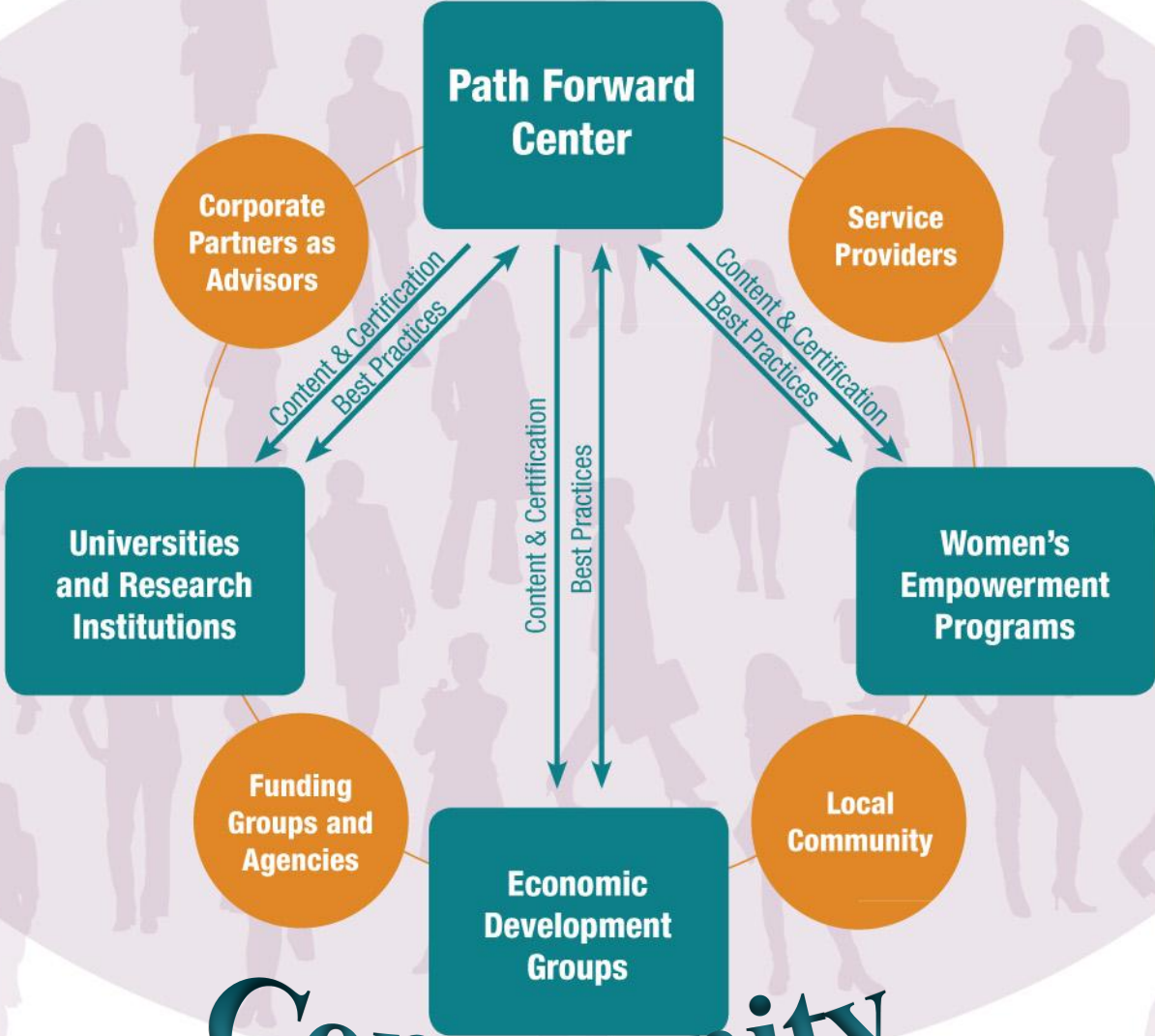
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ACTiVATE[®]
at THE GEORGE WASHINGTON UNIVERSITY

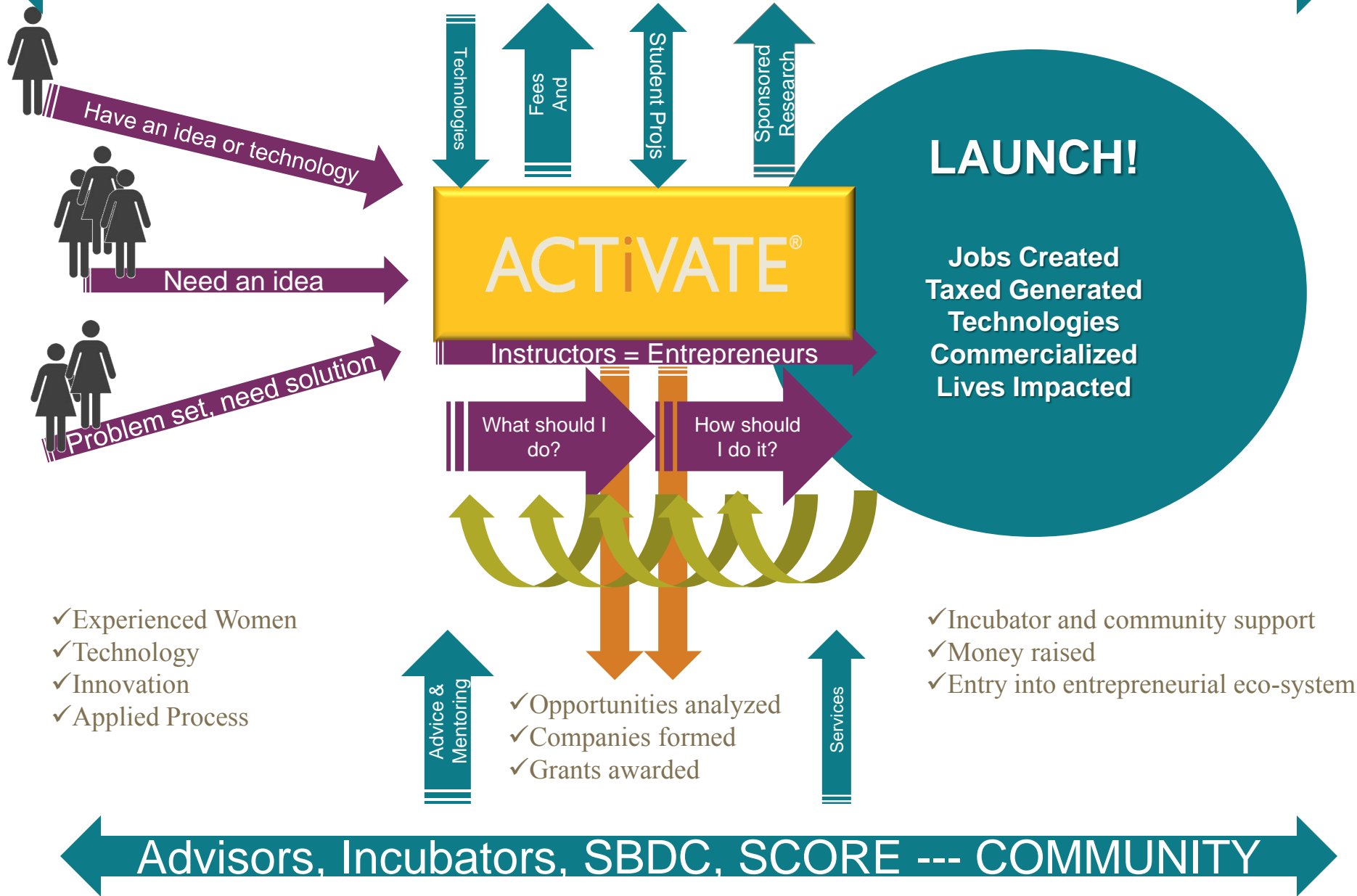


Delivery Model

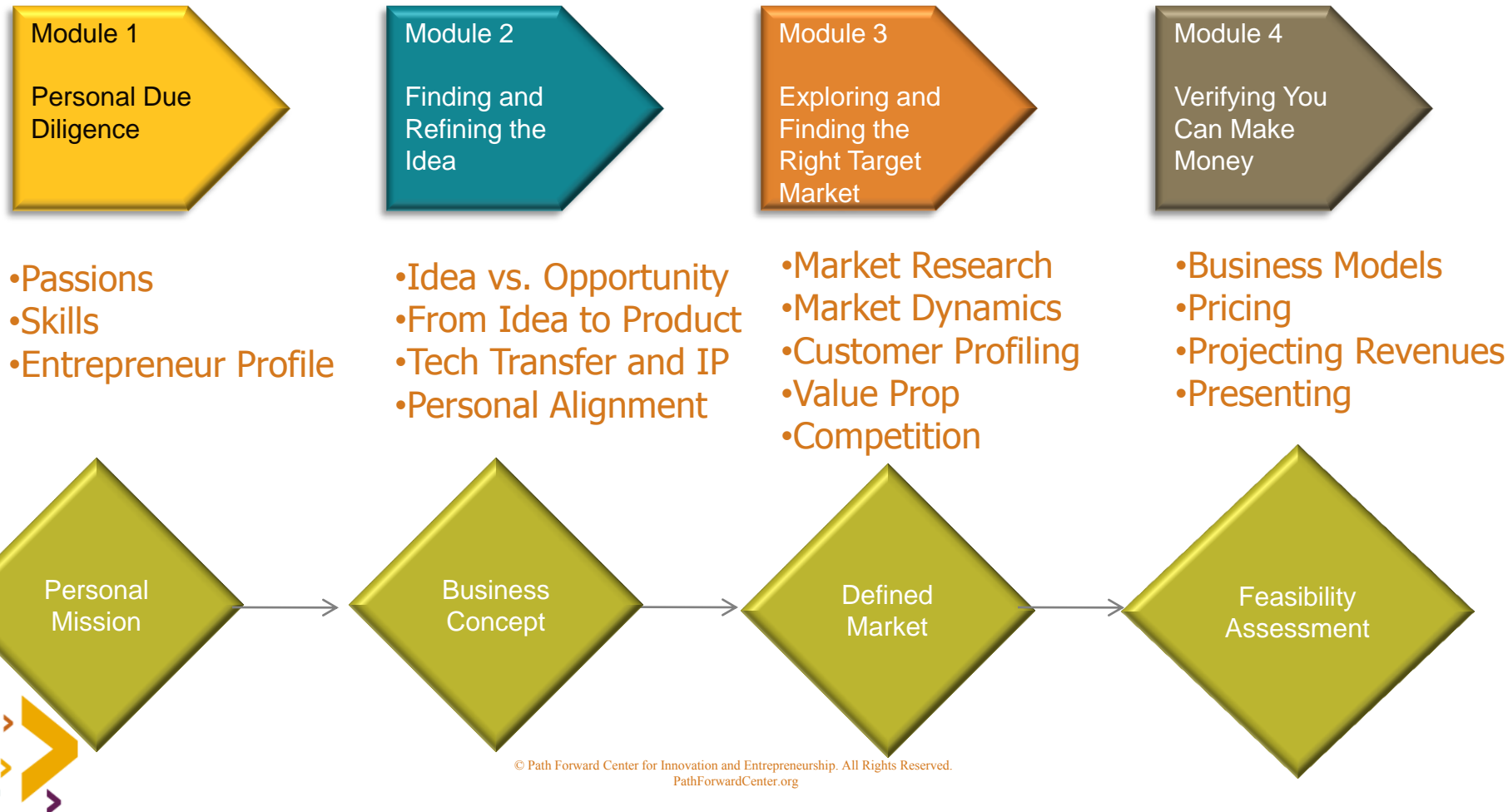


Community

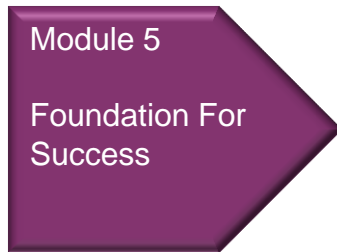
Universities and Research Institutes



Phase 1: What should I do?



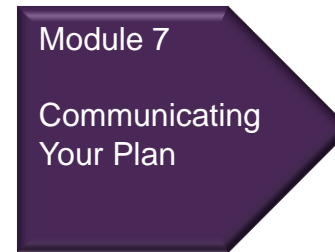
Phase 2: How should I do it?



- Designing the Engine of Growth
- Reaching Customers
- Planning
- Building your team
- IP and Licensing



- Resource mapping
- Non-dilutive and Dilutive Financing
- Equity
- Required Financials
- Building your financial model and plan



- Negotiations
- Visioning your future
- Pitching Investors



Women: An Opportunity

“The evidence is compelling that women can be **powerful drivers** of economic development.”

Groundbreakers: Using the strength of women to rebuild the world economy, Ernst & Young

“Women capable of starting growth companies may well be our greatest under-utilized economic resource.”

Overcoming The Gender Gap: Women Entrepreneurs as Economic Drivers

“High-tech companies built by women are **more capital efficient** than the norm.”

High Performance Entrepreneurs: Women in High Tech, Illuminate Ventures

“...by developing programs that support women creating high-growth businesses, the **positive impact on our society could be significant.**”

Lesa Mitchell, VP of Innovation, Kauffman



An Opportunity for Post-Docs

- › INNoVATE, funded as ACTiVATE spin-off to focus on post-docs
- › Goal: stop the ‘brain drain’ – post-docs leaving the area
- › Initially paired entrepreneurs and post-docs, shift focus to just post-docs and mid-career scientists



INNoVATE accomplishments

- 2010
- 16 postdocs and 9 scientists/business people
- List of > 60 technologies provided to class for review
- 13 technologies proposed by class
- 13 teams made final presentation
- 5 companies formed; 3 considering forming company

- 2011: Feasibility Phase
- 13 postdocs and 9 mid-career scientists
- 11 life science business mentors identified
- 27 technologies proposed by class
- 12 technologies proceed to Business Plan Phase
- 1 company formed; 5 considering forming a company



Thank you!

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