



FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL
AND MASSACHUSETTS GENERAL HOSPITAL



Licensing and Technology Transfer for Life Science and Tech Companies

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*Seema Basu, PhD
Partners HealthCare*

Partners in Numbers

CLINICAL

60,600

employees

6,500

physicians

8,300

nurses

1.5M

patients served annually

\$10B

revenue

RESEARCH

3,050

active principal
investigators

\$1.5B

research revenue

Innovation in Numbers (FY14)

Inventions	
Disclosures Received	550+
Licensing Activity	
Exclusive & Non-Exclusive licenses, Options	184
Start-ups	12
Licensing Income	
License, Option & Maintenance Fees, Milestone Payments, Other	\$20.7M
Royalties	\$57.5M
Research Support Activities	
Sponsored Research Agreements	188
Sponsored Research Income	\$66.5M

Partners Startup Companies



Commercializing Academic Technology

- Academic institutions do not make products
- Must partner with a company to take technology + invest additional resources to create product
- Time & Cost depends on the nature of product:
 - A therapeutic has the longest timeline, 15 - 20 years and >\$1b
 - A device is intermediate, 5 - 10 years and \$10 - \$30M
 - A diagnostic is the quickest, 1 - 5 years and <\$1M - \$30M (depending on the form of the diagnostic)

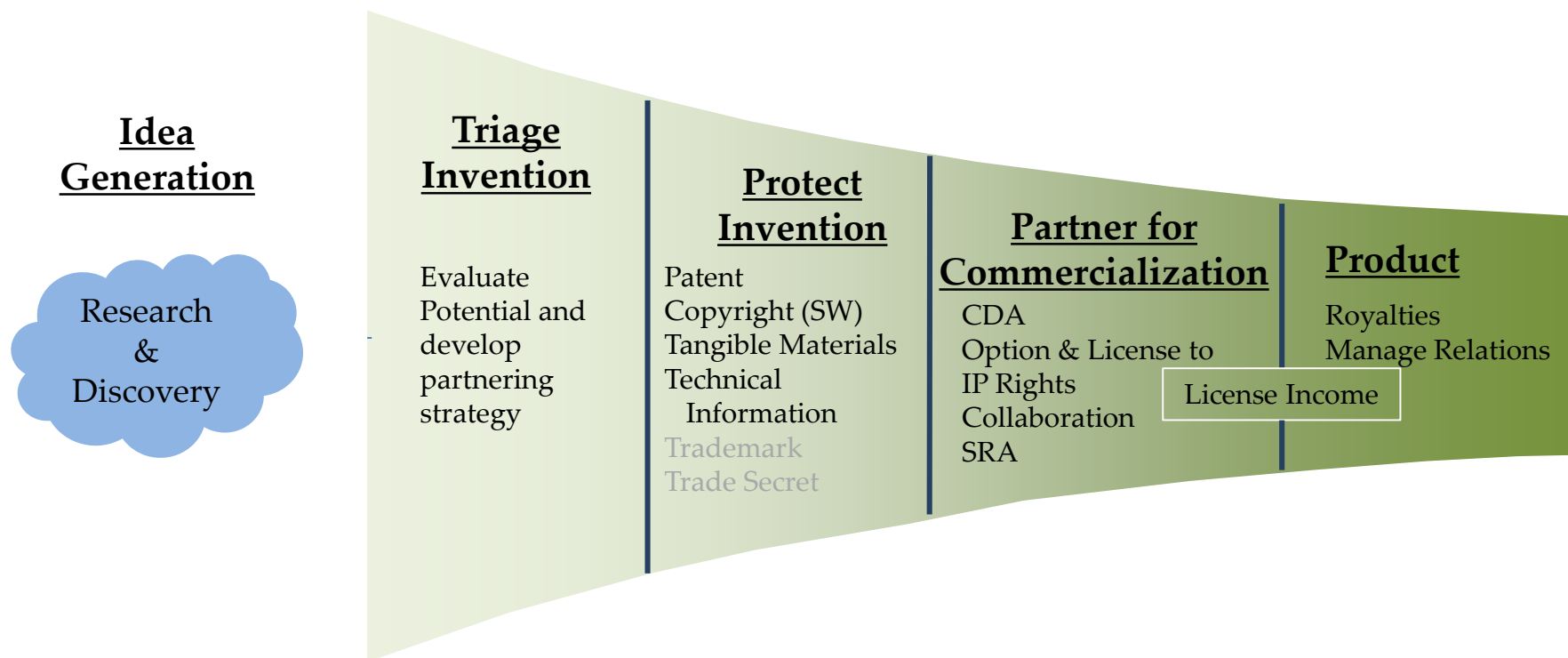
The Bayh-Dole Act

- Took effect in 1980
 - Enabled academic technology transfer and commercialization.
- Allows academic research institution to
 - elect title to the invention funded by the US Federal Government
 - grant licenses (including exclusive licenses)
 - charge financial terms including royalties
- Must share financial returns with inventors.
And institutional share must be used only for research and education.

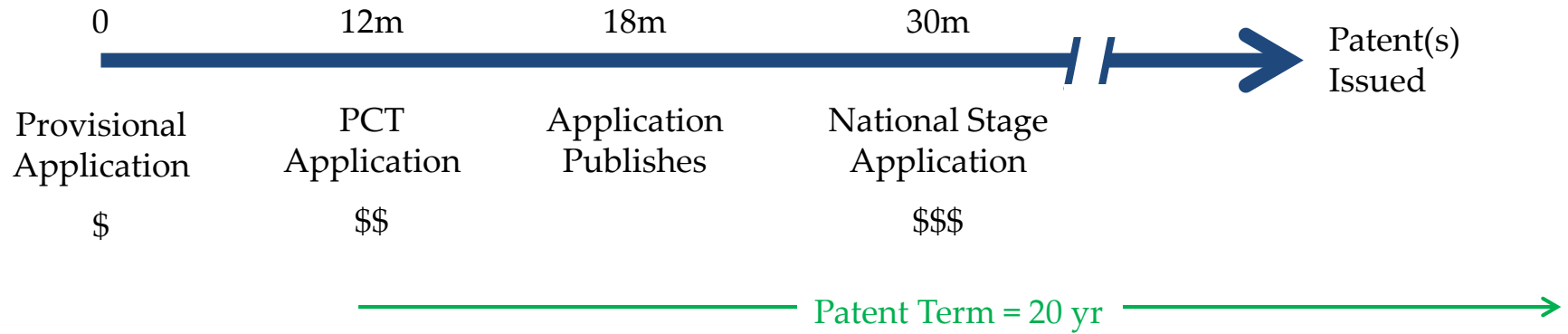
Our Mission

To facilitate the development of new products based on academic inventions so as to improve patient care and impact the public good.

Idea to Invention to Product



Patent Timeline



Option Agreement

- Precedes a License Agreement
- Mechanism to preserve business opportunity while developing business plan / due diligence / fund raising...
- Typical terms include:
 - Limited Term
 - An upfront option fee
 - Optionee pays ongoing patent costs
 - Diligence terms: raise capital, develop acceptable business plan, recruit management team & scientific advisory board, etc.
 - May or may not include a pre negotiated term sheet for license

Key License Terms

1. Scope of Rights
2. Retained Rights, Requirements
3. Financial Terms
4. Non-Financial Terms

Scope of the License

- IP to be Licensed:
 - Patent(s) or Patent Application (s); and/or
 - Technological Information; and/or
 - Copyright(s) and/or
 - Tangible Materials (s)
- Scope:
 - Exclusive or Non-Exclusive
 - Limited Exclusivity: Field / Time / Territory
- Field of Use

Retained Rights; Requirements

Even for Exclusive Licenses:

- a) right to the subject matter is retained for use by all academic institutions.
- b) for patents supported by federal funding, the Government
 - retains a royalty-free non-exclusive license
 - requires that Products used or sold in the United States shall be manufactured substantially in the United States
 - Waivers from the government are obtainable*
 - requires Licensee to 'diligently develop' the technology

Financial Terms

Typical Terms may include:

- Upfront cash fee and/or equity (common shares)
- Reimbursement of past patent costs incurred
- Reimbursement of ongoing patent costs
- Annual Fees (pre sales) and Minimum Annual Royalties (post sales)
- Specific Milestone Achievement Payments
- Change of Control Payment
- Portion of Sublicensing Fees/Revenue
- Running Royalties

Other Key Terms

- Reporting obligation and Auditing rights
- Patent Infringement Process
- Indemnification
- Insurance
- Term of License and Termination
- Non Use of Name

Of Note

Institutional Resources:

Institutional Funds maybe available to invest in spin outs
PIF (Partners Investment Fund)

Institutional Policies:

- License terms may take into account Institutional COI (Conflict of Interest) Policies to avoid biases of perception of biases due to financial or relational interests.
 - Clinical Care - are patients' interests foremost?
 - Research - is the design, conduct and reporting of research objective?
 - Education - is the audience receiving unbiased information?
- Investigators must follow Institutional Outside Activity Policies for personal Founder and Consulting Agreements

Institutional Co-Owners:

Typically academic institutions enter into a joint invention administration agreement allowing one institution to be the lead party with the agency to manage, administer and license to third parties their joint interests in jointly owned IP.

Thank You

Seema Basu, PhD

Market Sector Leader | Innovation

PARTNERS HEALTHCARE

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