



## Innovation Funds – Approaches and Challenges of Direct Cash Investing

Welcoming remarks will begin at  
11:55 a.m. Eastern Time.

The formal presentation will begin at Noon Eastern

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## Innovation Funds – Approaches and Challenges of Direct Cash Investing

### Speaker:

Louis P. Berneman, EdD, CLP, RTTP, *Osage University Partners and HealthCare Royalty Partners*

Sept 24, 2014



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**Louis P. Berneman, EdD, CLP, RTTP**

*Osage University Partners and  
HealthCare Royalty Partners*



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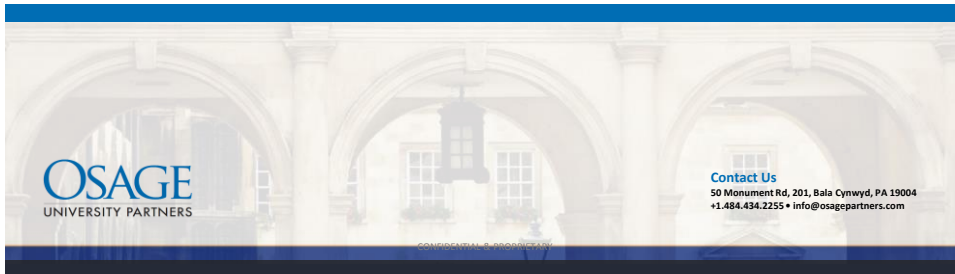
### Innovation Funds

Louis P. Berneman

AUTM Webinar

September 24, 2014

University Innovation, Realized.



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### Louis P. Berneman, EdD, CLP, RTTP

Founding Partner, Osage University Partners

Lead Academic Advisor, HealthCare Royalty Partners

Managing Director, Texelerate, LLC

- Licensing transactions
- Expert witness services

#### Previously

- *Managing Director*, U Penn CTT
- *Co-founder*, 4 "academic" startups
- *Past President*, AUTM
- *Former VP and Trustee*, LES and LES Foundation
- Columbia University Teachers College, MA, MEd, EdD
- UC Santa Barbara, Teaching Credential
- Penn State, B.A.

## Direct Cash Investing Approaches and Challenges

- In recent years, universities and their TTOs have established a variety of innovation funding vehicles to:
  - promote local economic development;
  - foster the entrepreneurial / innovation ecosystem; and
  - facilitate the commercialization of discoveries.
- These innovation funding investment vehicles come in a variety of forms, but can be characterized generally as:
  - proof-of-concept funds;
  - seed funds; and
  - growth (or venture) funds.

## Why All This “investing” Activity Now?

- The primary catalysts for this trend, I believe, are:
  - the scarcity of financial resources for de-risking and adding value to embryonic technologies and the further exasperating of the “valley of death”;
  - Top down pressure from Trustees, Presidents, Provosts, Deans and other institutional leaders to advance the innovation ecosystem and promote entrepreneurship;
  - Pressure from local/state/regional government officials to promote economic development; and
  - Bottom up pressure from faculty (and students) to facilitate commercialization (for a variety of reasons).



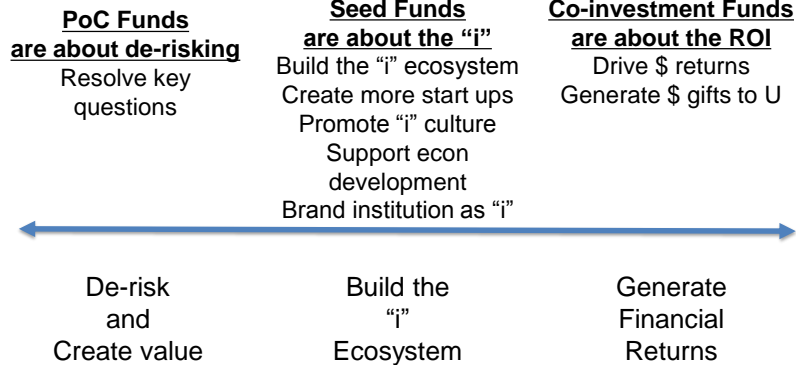
## Direct Cash Investment Considerations

- What are the goals for your fund(s)?
- How will you measure success?
- From whom and how will funds be obtained?
- Who and how will “investment” decisions be made?
- Who and how will these funds/programs be managed?
  
- Today, we’ll address these and related questions.
  
- **Unlike other webinars, I would like this one to be highly interactive with YOU engaged – asking questions, making comments, and contributing – throughout.**

## Innovation Funds Have a Variety of Goals

- Promote innovation
- Facilitate commercialization
- Recruit faculty
- Add-value pre licensing
- De-risk embryonic technologies
- Advance the innovation ecosystem
- Create more (investable) start ups
- Improve the quality of new ventures
- Recruit investable entrepreneurs
- Obtain angel and VC financing
- Generate financial returns
- Appease Trustees
- **Other goals?**

## Different Goals for Different Types of Funds



## Different Types of Innovation Funds

- **Proof-of-Concept (PoC) Funds – Faculty Driven**
  - Promote innovation, de-risk, add-value, and facilitate commercialization
- **Seed Funds – Mission Driven**
  - Funds to advance the innovation ecosystem (mission driven) by launching new ventures, recruiting management, and obtaining VC financing
- **Growth (Venture) Funds – ROI driven**
  - Funds to drive growth and financial returns

## Proof-of-Concept Funds

University Innovation, Realized.



## Proof-of-Concept Funds

- Proof-of-concept / translational research / bridge-the-gap
- Becoming ubiquitous
- \$0.5 M to 2 M Fund Size
  - \$25,000 to \$250,000 per project
  - Generally managed by TLO personnel
    - Other institutional stakeholders often participate
    - Preferably folks from industry/venture participate and serve in an voluntary, advisory capacity
  - PoC funds often also include provision for mentorship/oversight
  - **What is the size of your PoC fund?**
  - **Who manages?**
  - **Do industry/venture folks contribute/participate?**

## Success Metrics for PoC Funds

### Project Metrics

- Number of projects completed?
  - Of these, how many had a successful scientific outcome i.e. achieved major technical milestones?
- Strength of IP filed
- Number / percentage of projects subsequently partnered -- licensed to established companies / start ups

### Financial Metrics

- Number of licenses, options or sponsored research agreements executed
- Cash on Cash return for funds invested
  - often happy with break even
- External capital raised post PoC funding

## Examples of Proof-of-Concept Funds

- Boston University Ignition Grants
- Caltech Grubstake Program
- Cass Business School Entrepreneurship Fund
- Harvard Technology Development Accelerator Fund
- NYC Research Institutions Translational Research Fund
- Royal Society Enterprise Fund
- St Louis Research Institutions Translational Research Fund
- UCSD Von Liebig Program
- University of Cambridge Discovery Fund
- University of Chicago Innovation Fund
- University of Michigan MTRAC
- University of Oxford Innovation Fund
- University of Wisconsin Catalyst Fund
- **Other?**

## Seed Funds

### University Innovation, Realized.



## Seed Funds - Goals

- Mission driven - build the Innovation (entrepreneurial) ecosystem
- Create more start-ups
- Promote a culture of innovation among faculty and students
- Support economic development
- Brand the university as a hub of innovation

## Seed Funds

- Opinions differ regarding the need for experienced investment personnel to manage seed funds
  - Small funds are difficult to staff professionally (venture economics)
- Funds help provide access to support professional services
- Funds help attract management and advisors with business development and capital formation expertise
- Funds also often support student start-ups
- Critical for success is clear remit and providing support services beyond capital in terms of recruiting management and follow-on capital

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## Seed Funds - Success Metrics

- Ultimate return is in creating start-ups (licensees) that, theoretically, but for the availability of seed funds, would not get launched
- Most seed funds have shown a track record of creating more start-ups, attracting follow-on capital, and generating financial returns from licenses (e.g. fees and royalties)
- Traditional ROI financial return is uncertain (at best)
  - Average holding period very long
  - Ability to participate in follow on rounds is critical to ROI

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## Examples of Seed Funds

- Connecticut Innovations (state funded)
- Illinois Ventures (UIUC funded)
- Utah Kick Start - \$15M
- WARF – 3 @ \$10M (Endowment funded)
- Mission Bay/QB3 - \$12M (LPs)
- Innovate Indiana - \$10M
- Ohio State and Ohio University - \$35M
- W \$20M (U Washington) (mix of funders)
- **Other?**

## Venture/Growth/Co-Investment Funds

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## Venture, Growth, Co-Investment Funds

- ROI Driven
- Preferred investment access is critical (e.g. participation rights)
- Essential to have access to a robust pipeline -- quality and quantity -- of scientifically and commercially superior investment opportunities
  - Pipeline is essential to avoid adverse selection
- Often partnered with professionally managed funds

## Examples of Growth Funds

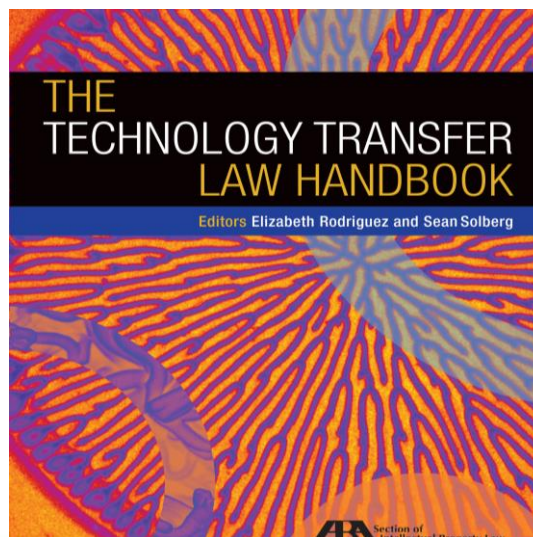
- Osage University Partners Fund -- \$100 M
    - Participation Rights
    - 8 University Partners and 38 Associate Partners
    - \$25 B research base
  - MINTS – U Michigan - \$25 M
  - UT Horizon Fund
  - GRA Venture Fund
  - Imperial Innovations \$140 M
  - Partners Innovation Fund (MGH and W & B) - \$35 M
    - \$1.4 B research base
  - Mayo Medical Ventures \$25 M
    - \$600 M and 3,000 MDs research base
- Other?**



## Sources of Capital

- Royalty monetization
- Retained revenues ('earnings')
- Endowment
- Operating funds
- Donors
- State / other public funds
- Patient advocacy and venture philanthropy funds
- **Other?**

Christopher F. Wright and Louis P. Berneman, "The University as a Venture Investor: Models and Challenges for Equity Licensing, Direct Investment and Partnering Methods" in the American Bar Associate Technology Transfer Law Handbook, Elizabeth D. Rodriguez and Sean D. Solberg, Editors, 2014.



# VC 101: A PRIMER LES NOUVELLES

## Venture Capital 101

### Venture Capital 101: Financing Mentality, Jargon, Term Sheets, And Documents

A Primer for Academic Technology Transfer Managers and Industry Licensing Executives

By Louis P. Berneman and Christopher F. Wright

#### Introduction

With the heightened attention of senior academic administrators to promoting economic development and fostering its business ecosystems, academic technology transfer organizations are increasingly focusing their commercialization activities on identifying, evaluating, incubating, accelerating, and financing start-up ventures. This top-down process is aligned with bottom-up pressure from faculty researchers who, absent for different reasons, are likewise increasingly interested in the impact of their discoveries and seeking to commercialize them through start-ups. Moreover, technology managers are now thrust into new roles, such as creating performance metrics, executing investable management, raising capital, and positioning licensed technology to become part of a commercially successful product in a thriving company. Likewise, for a variety of reasons, industry licensing executives are increasingly called upon to provide corporate R&D projects to start-up ventures. Like their academic counterparts, industry licensing executives find them-

selves dealing with financing and other new venture business development issues. Technology managers and industry licensing executives now need to understand the mentality

of venture capitalists and other institutional investors and become fluent with their jargon, term sheets, and documents. This article seeks to demystify venture capital ("VC"), start-up financing, and

background.

Not for profit research institutions continue to be epicenters of innovation as evidenced in the venture cycle of technology transfer and commercialization in 1945 by Van

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search in academic has grown steadily and significantly. See Figure 1. University start-ups are the epitome of such's venture cycle, vision an appropriate 75 percent of



Louis P. Berneman and Christopher F. Wright, "Venture Capital 101: Financing Mentality, Jargon, Term Sheets, and Documents - Primer for Academic Technology Transfer Managers and Industry Licensing Executives," in *les Nouvelles*, the Journal of the Licensing Executives Society, March, 2014

## Contact

### SUMMARY

Osage University Partners (OUP) invests in startups that have licensed technologies from universities and research institutions. OUP has partnered with over 65 academic institutions to invest in pioneering technologies and visionary entrepreneurs targeting large market opportunities. The Fund invests across a range of technology sectors and company stages, and typically co-invests with other leading venture funds.

**Louis Berneman**

**Founding Partner**

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# Questions? Comments?



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