



A Career in Technology Transfer: Commercializing Research in Academia

Christopher Barton, J.D. Ph.D.

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My Background

Finding the fit that was “just right” took me 12 years of schooling.



Bayh Dole Act

Created uniform federal Intellectual property policy for federally sponsored research.

Nonprofits and small businesses could elect title to inventions that were created in whole or in part with federal funding

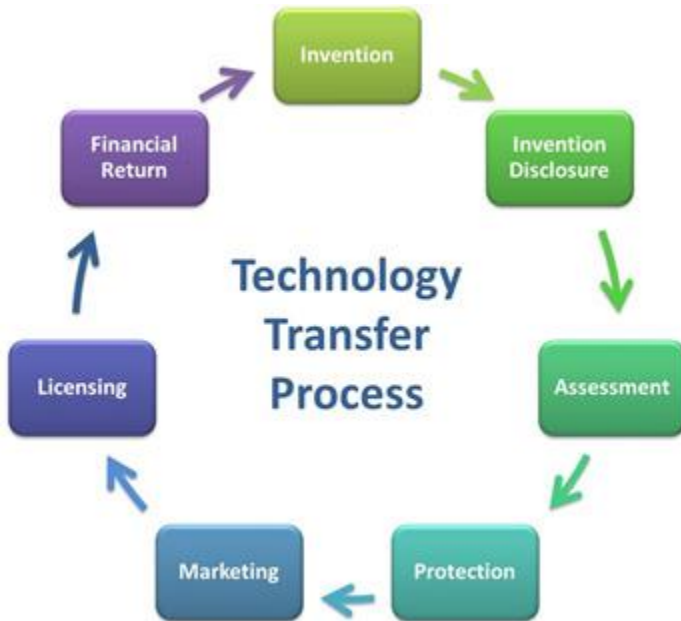
However universities and labs would have to agree to set due-diligence requirements

In return, Universities could:

- Manage the commercialization process
- Grant Licenses (including exclusive licenses)
- Take royalties (including mandated sharing of royalties with inventors)

What is Technology Transfer?

“The process of transferring scientific findings from one organization to another for the purpose of further development and commercialization.”



The process typically includes:

- Identifying new technologies – Intellectual Property.
- Protecting UofL Intellectual Property through patents and copyrights.
- Analyzing market potential.
- Forming development and commercialization strategies such as marketing and licensing to:
 - Existing companies.
 - Start-up companies.

Typical Intellectual Property In Academia

Copyright

- *Original work on tangible media*
- *e.g., book, music, art, choreography, software*
- *Author's life + 70 years*

```
def composeimage( x, y, colr, radius, points, diminish ) :
    nofill()
    stroke()
    strokewidth( 0.05 )
    autoclosepath( False )
    count = int( radius * 1.3 )
    colr = colors.color( colr )
    grad = colors.gradient( colr.darken( 1.0 ), colr,
        colr.lighten( 1.0 ).desaturate( 0.4 ),
        steps = count )
    for i in range( count ) :
        stroke( grad[ i ] )
        a = 0.75 - 0.25 * float( i ) / count
        colors.shadow( dx = 5, dy = 8, alpha = a, blur = 15 )
        path = oval( x - radius + i * 0.5, y - radius + i * 0.5,
            radius * 2 - i, radius * 2 - i, draw = False )
        drawpath( brushpaint( path, points = int( points - i * 0.2 ),
            length = radius - i + random( count - i ) / 3,
            diminish = diminish ) )
```

Patent

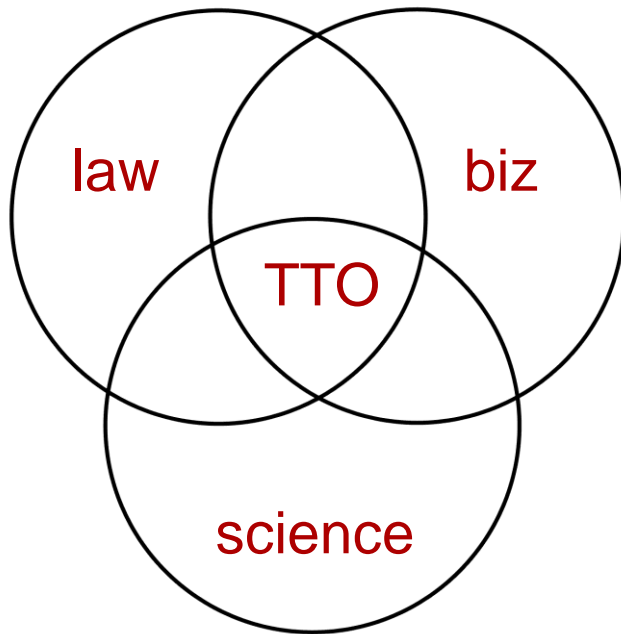
- *Exclusive right in exchange for sharing your invention*
- *Exclusivity limited to 20 years*
- *Has to be new, non-obvious and useful*



Value of Technology Transfer to the Academic Institution

- ❖ Recognition for discoveries made at the institution
- ❖ Compliance with federal regulations
- ❖ Attraction and retention of talented faculty
- ❖ Local economic development
- ❖ Attraction of corporate research support
- ❖ Licensing revenue to support further research and education

The Typical Technology Transfer Professional



-
- Education: Ph.D., J.D., or M.B.A. (sometimes even a M.S.)
 - Jack of all trades mindset
 - Interested in learning about new technologies
 - Interested in learning about cross functional areas
 - Attention to detail
 - Creative
 - Desire for a good work/life balance.



Commonly Seen Job Titles

Technology Transfer Associate

Technology Transfer Manager

Technology Transfer Officer

Commercialization Officer

Licensing Assistance

Licensing Associate

Licensing Manager

Licensing Officer

Business Development and Licensing manager

Technology Licensing Analyst

Technology Transfer Specialist

Many titles, but often the same function.

What is the typical day like?

(May depend on the type of office you are in)

- Review New Disclosures
 - Do literature searches and review
 - Do preliminary Market Searches
- Meet with Inventors/Faculty
- Review Patent Actions and interact with patent attorneys
 - Prompt inventors to respond and provide input
- Generate Marketing Materials
 - Abstracts and Slide Decks
- Research and Contact Companies
- Negotiate and Draft License or Option Agreements
- Monitor company compliance with Agreements



How is success measured?

Overall Office Measures

Invention Disclosures *
Research Support Agreements *
Material Transfer Agreements *
Patent Applications
Patents Awarded *
License/Option Agreements *
Royalties/License Income *
Associated Income *
Patent Reimbursement Income *
Total Income *

Individual measures are how well you contribute to these Office Goals.

* Can influence, but not directly control.

Challenges

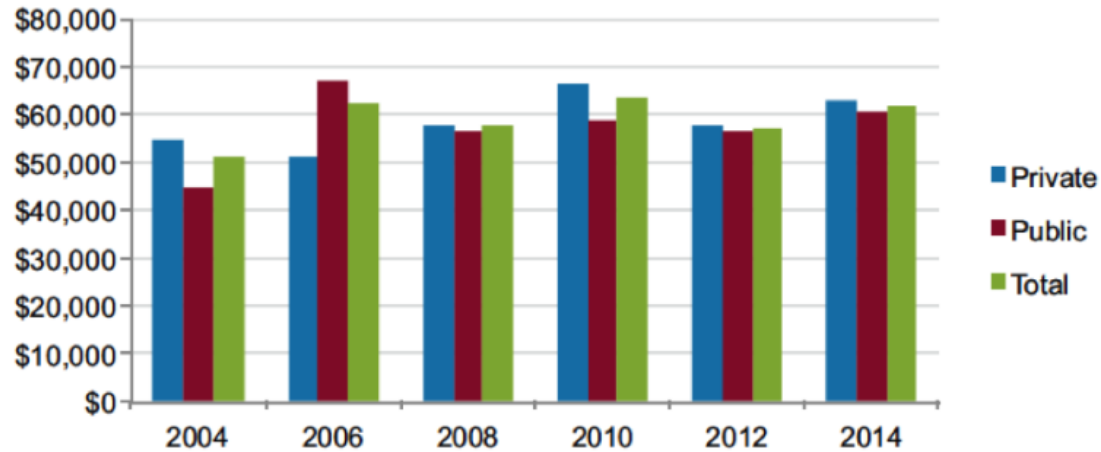
- Early Stage Technology.
- Finding an interested commercial entity can be difficult.
- Your docket is driven by researcher output.
- Valuing a technology can be difficult.
- Prior deals are always under scrutiny.
- Learning curve is steep but forgiving.
- Career progression may require institution jumps.



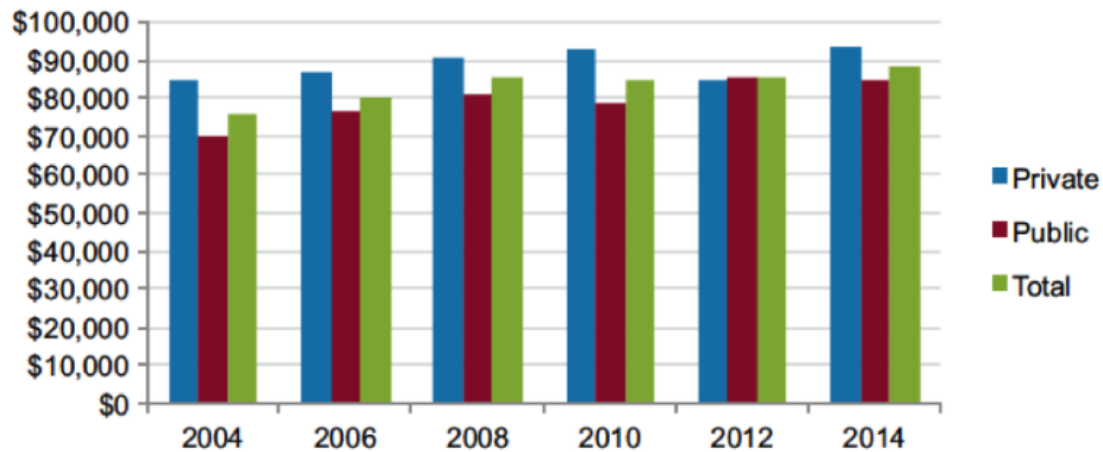


Salaries (for Licensing Associates)

0-4 years

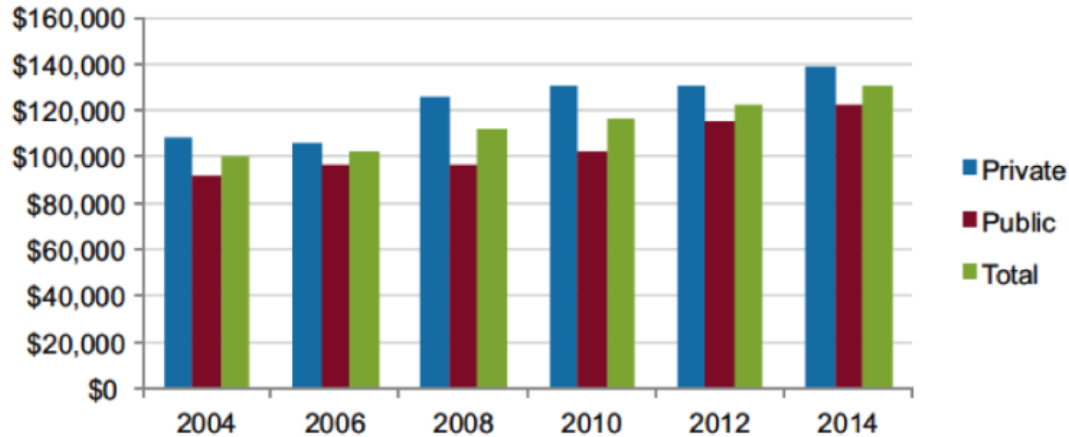


2-10 years

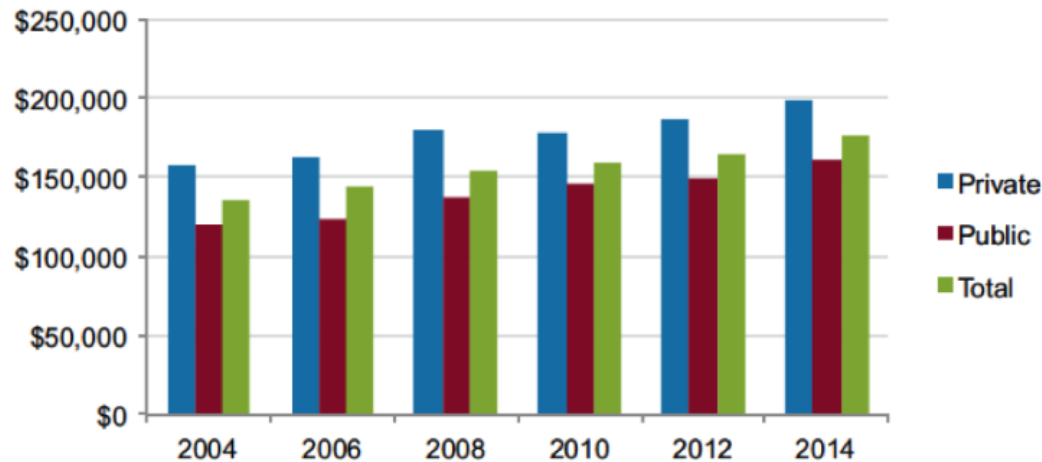




Director/Associate Director Salaries



Associate Director (5+ years)



Director (5+ years)

But it's not for everyone...

- Someone who can't handle uncertainty.
- Those who are extremely risk averse.
- Those who want to be constantly moving.
- Extreme introverts.
- Those who lack diplomacy skills (you can't call a researcher's "baby" ugly).

How to break in...

Hello
my name is

INTERN

Exit Options



- Corporate
 - Business Development
 - Technology Scout
- Venture Capital
- Patent Examiner/Patent Agent
- Scientific Advisor for A Law Firm

Current Internship Opportunities

- Volunteer Interns always welcome!
 - Like to have a commitment of ~6-8 hours per week.
 - Always looking for volunteers with scientific backgrounds.
 - Duties can vary based on background and desire to learn.
 - Can work with Intern and PI for schedule flexibility.



Technology Transfer Resources

- University of Louisville Office of Technology Transfer: <http://louisville.edu/research/technologytransfer>
- Association of University Technology Managers: www.autm.net
- Licensing Executives Society: www.lesusacanada.org



EVPRI's Office of Technology Transfer

Who we are:

T. Allen Morris, [Director](#)

Holly Clark, [Deputy Director – Cancer Center technologies](#)

Chris Barton – [Health Science Campus technologies](#)

Eric Castlen – [Engineering technologies](#)

Mary Anne Copeland – [MTAs, NDAs, other agreements](#)

Matthew Hawthorne – [Software technologies, industry engagement](#)

Jody Carrol– [Financial Coordinator](#)

Karen Johnson – [Office Manager](#)

Corin Hindenach – [Patent/IP Correspondence](#)

Jacob Edmonds – [Agreement Docket Coordinator](#)

Brett Moreno – [Marketing](#)

Interns – [Agreement negotiation, technology review, marketing](#)

Also: Eugene Krentsel

Office of Technology Transfer

Questions? Please contact us!

Where to find us:

300 E. Market St., 3rd floor

Phone: (502) 852-2965



<http://louisville.edu/research/offices/technology-transfer>