



Session Outline

Day 2 : 22 Apr 2025

1730 – 1930



Session 02: An introduction to Technology Licensing

Ashley Stevens

Session 2: Introduction to Technology Licensing

**Ashley
Stevens**



Ashley Stevens

PhD, CLP, RTTP

Dr. Stevens is a biotech entrepreneur and technology commercialization expert. He co-founded Genmap, Inc. and Kytogenics, Inc., bringing academic innovations to market. He later led technology transfer at Dana-Farber Cancer Center and Boston University, where he helped launch 55 startups. He currently teaches commercialization at Osaka University.







Affiliation

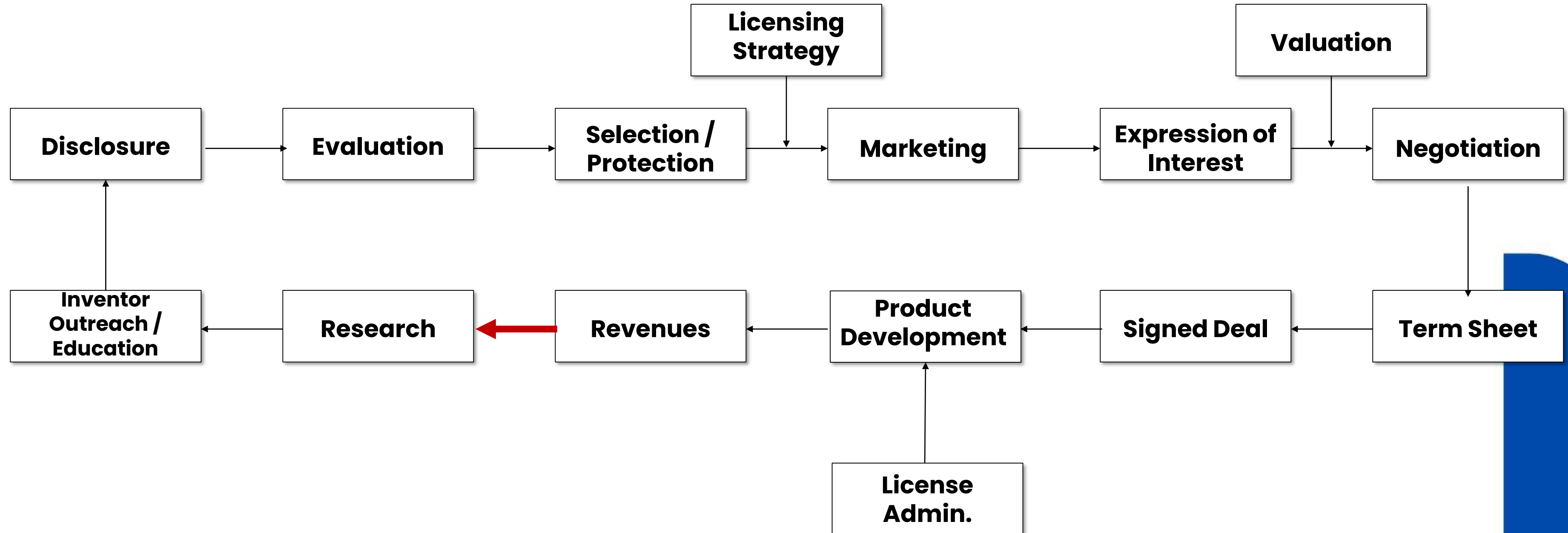
- Past President Association of University Technology Managers, USA(AUTM)
- Head of Tech Transfer for Boston University
- President Focus IP Group, LLC

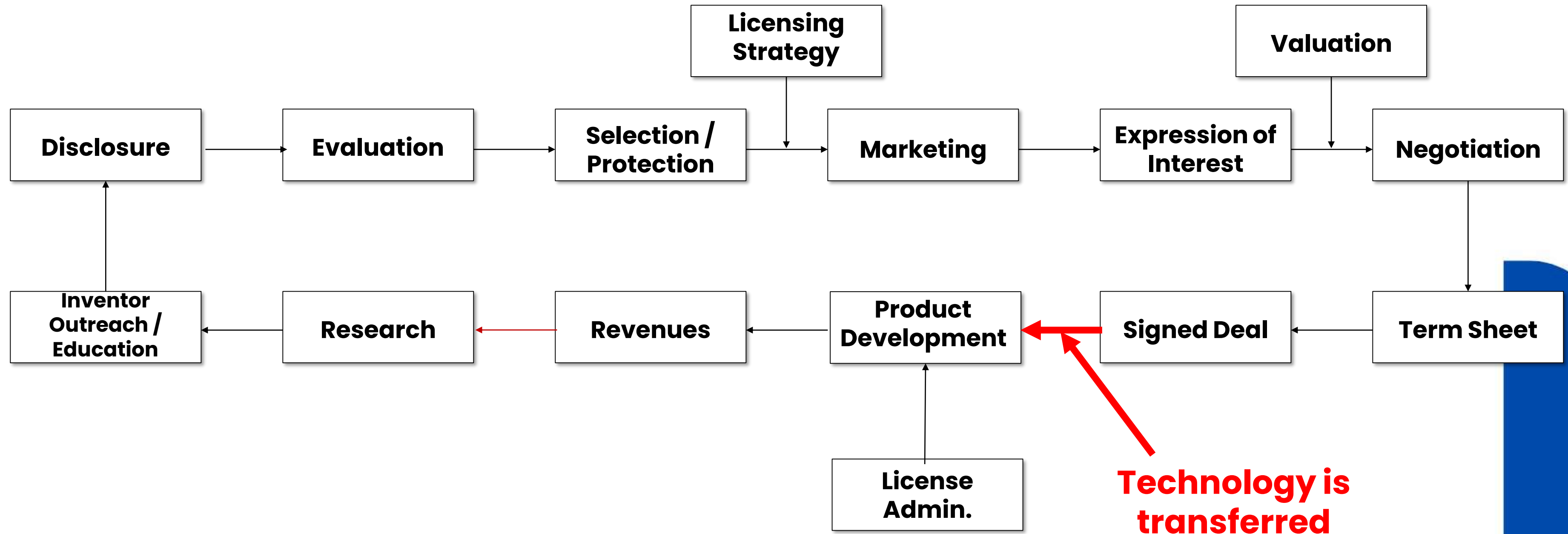


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Agenda

-  **How do we transfer technology?**
-  **Why do we license technology?**
-  **Types of licenses**
-  **Anatomy of a license agreement**
-  **Extracting value through a license agreement**
-  **Licensing vs assigning**





What is Technology Transfer?

- » Academic institutions don't develop and sell products
 - » Not in our mission
- » We need to find a company to take our inventions that have promise and develop them
 - » An existing company
 - » Large
 - » Small
 - » A new company
 - » Explicitly set up to develop the technology
 - » A "start-up"
 - » Aka a "spin-out"
- » We then transfer the rights to the technology to them

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Transferring the Rights

- » **Two ways we can do this:**
 - » **We can assign the rights**
 - » **Aka “Sell”**
 - » **We can license the rights**
 - » **Aka “Rent”**

What's the Difference?



Analogy:

-  **You need somewhere to live**
-  **Potential Solutions**

What's the Difference?



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What's the Difference?

- » **Analogy:**
 - » You need somewhere to live
 - » Potential Solutions
 - » You buy a condo
 - » You rent an apartment
 - » You live in your parent's basement

What's the Difference?



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You Buy a Place

- » **It's yours**
 - » **Forever**
 - » **Previous owner has no further rights**
- » **The problems are yours**
- » **You've paid upfront**
 - » **But you got a mortgage and have on-going payments**
- » **You can decide what to do with it:**
 - » **Live in it**
 - » **Rent it out**
 - » **Rent out part of it**
 - » **Sell it**
 - » **Demolish it and build something better**

You Rent a Place

- » **You have the right to live there**
 - » **For the duration of the lease**
 - » **And as long as you pay the rent**
 - » **And as long as you obey any other rules the landlord imposes**
 - » **Noise**
 - » **Cutting the grass**
 - » **Taking out the trash**
 - » **Etc.**
- » **The landlord fixes the problems**
- » **The landlord still has the rights**
 - » **Owns it**
 - » **Can decide whether to renew the lease**
 - » **Can inspect periodically**
 - » **To ensure you're obeying the rules**

You Rent a Place from Airbnb

- » You rent just a room
 - » License part of the rights
 - » Field of use
 - » Territory

You Live in your Parents' Basement



Failure to launch!

- » **We license (rent)**
 - » **We don't assign (sell)**
- » **In the U.S., the law doesn't let us assign if the research was federally funded**
 - » **Without the permission of the funding agency**
 - » **And they just won't give permission**
 - » **They feel that an exclusive license gives the company all the control over the IP they need to successfully commercialize it**
 - » ***"If Google can get started with just an exclusive license from Stanford....."***
- » **About 50% of academic patent applications live in the university's basement**
 - » **Can't license them**

Why License not Assign?

- » **It's about failure, not success**
- » **If the licensee fails to successfully develop our technology into a product**
 - » **We want to get the technology back**
 - » **To find someone else to develop it**
- » **Much easier to get it back if you still own the technology**
 - » **Give the licensee notice of termination of the license**





Why License not Assign?

- » **Licensing is a much more precise and flexible process than assigning**
 - » You can license exclusively or non-exclusively
 - » One company or many
 - » You can just license parts of the rights
 - » License different parts to different companies
- » **You can only assign the rights to one company**
 - » Licensing is like a scalpel



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Licensing is a much more precise and flexible process than assigning

-  **You can license exclusively or non-exclusively**
 -  **One company or many**
-  **You can just license parts of the rights**
 -  **License different parts to different companies**

You can only assign the rights to one company

-  **Licensing is like a scalpel**
-  **Assigning is like a chain saw**



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WHY DO PEOPLE LICENSE TECHNOLOGY?

WHY Does Someone License Something?

- » **Because they can't or don't won't to develop a technology**
 - » **University Not part of the mission**
 - » **Small company Inadequate resources to take to market**
 - » **Invention may not be sufficient to market a product**
 - » **Platform technology – needs additional inventions to productize**
- » **Do a deal whereby someone else bears the majority of the financial risk going forward**
 - » **And receives the majority of the reward**
 - » **The inventor / licensor receives part of the reward**

In other words

- » The inventor of the technology accepts that
 - 5% (or 10% or 25%) of something is worth more than 100% of nothing

Or even

- 5% (or 10% or 25%) of a big pie is worth more than 100% of a small pie

TYPES OF LICENSES

Types of Licenses

In-Licensing

- » Acquiring the right to develop and sell a product
 - » Enabling license – patents + know-how
 - » Freedom to operate – route through toll gates erected by blocking patents

Out-Licensing

- » Granting rights to intellectual property to others
 - » Enabling license – giving up a product to someone with more resources
 - » Freedom to operate – extracting value from a platform technology

Cross-Licensing

- » Trading IP rights
 - » Mutual elimination of road blocks
 - » Competitive or non-competitive products

Types of Licenses

Enabling (Carrot)

- Includes know-how; often a collaboration
- Done at an early stage
- Patents probably still pending

Freedom to operate (Stick / Assertion)

- Naked
- Close to product launch
- Patents issued

Cross Licensing

- » **Two parties grant each other licenses to their patents**
 - » **Fighting to a draw**
 - » **Strengthens both versus the competition**
- » **Can be royalty bearing or royalty free**
 - » **Offsetting**
 - » **Generally at concessionary rates**

Sony, Samsung Will Share Bulk Of Their Patents

By PHRED DVORAK
And EVAN RAMSTAD

TOKYO—Sony Corp. and Samsung Electronics Co. said they agreed to share the bulk of their patents, in an unusual move that shows how changes in the electronics industry are pushing some rivals into closer cooperation.

The two giant electronics companies signed a cross-licensing agreement—or agreement to use each others' patents free of charge or for a discounted fee—that covers all technologies the companies deem basic, or roughly 90% of their vast patent holdings. In the U.S. alone, Sony of Japan holds about 13,000 patents while Samsung, of South Korea, holds about 11,000.

The companies also agreed on specific technologies, such as some relating to Sony's PlayStation videogames or Samsung's home networking, that each considers vital to its competitive strategies, and therefore out of bounds. They also kept to themselves some important technologies in the growing market for flat-screen television sets.

The agreement, which lasts until 2008, lets two of the world's biggest electronics makers develop products in an increasingly crowded market without worrying about butting heads—even as rivals are bogged down in litigation. It wasn't clear if the pact will pressure other companies to make similar moves.

Toshiba Corp. of Japan last month sued Hynix Semiconductor Inc., of South Korea, over memory-chip technology, while Matsushita Electric Industrial Co., of Japan, and South Korea's LG Electronics Inc. are embroiled in a plasma-patent dispute so fierce that they have managed to get each others' plasma panels banned from their home markets.

The Sony agreement with Samsung is an attempt to head off that kind of discord, according to Yoshihide Nakamura, Sony's senior vice president in charge of intellectual property. A Samsung spokeswoman said Samsung executives weren't available to comment.

In the U.S., most cross-licensing agreements don't raise antitrust problems as companies don't say they will be collaborating on product plans or prices. As a result, many companies with large patent portfolios routinely seek cross-licensing accords, even with competitors.

December, 2004

Newer Companies

- » Acquiring patent portfolios for defensive purposes
 - » e.g., Facebook
 - » Was third social networking site; late to the party
 - » Friendster's first patent filed 2003 vs Facebook in 2007
 - » Acquired ~1,500 patents from others

SELLER	NO. OF PATENTS	PRICE (\$MM)	PRICE/PATENT	DATE	COMMENTS
IBM	750			3/22/2012	For Android; software, networking
Microsoft	650	\$550	\$846,154	4/23/2012	Majority of portfolio acquired from AOL
Friendster/MOL	18	\$40	\$2,222,222	5/1/2010	Social networking
IPG (Philips)	11				
Walker Digital	9				
Hewlett Packard	9				
C. Cheah & A. Tuzhilin	5				
British Telecom	3				
Divan Industries	1				
Applied Industries	1				

- » Sued by Yahoo over 10 patents
 - » Settled
 - » Cross license, strategic partnership

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ANATOMY OF A LICENSE AGREEMENT

Contractual Aspects

- » **When you license something to somebody, you're creating a relationship which, if successful, will last 20 years**
- » **Relationships are unequal**
 - » **Licensor has made their investment**
 - » **Looking for a return on that investment**
 - » **Licensee is taking on substantial risk**
 - » **Financial**
 - » **Opportunity cost**

License Agreement Outline

Recitals

Definitions

License Grant

Fees, Royalties, & Payments

Patent Prosecution & Infringement

Obligations of the Parties

Representations & Warranties

Indemnification & Insurance

Confidentiality & Publication

Term & Termination

Miscellaneous

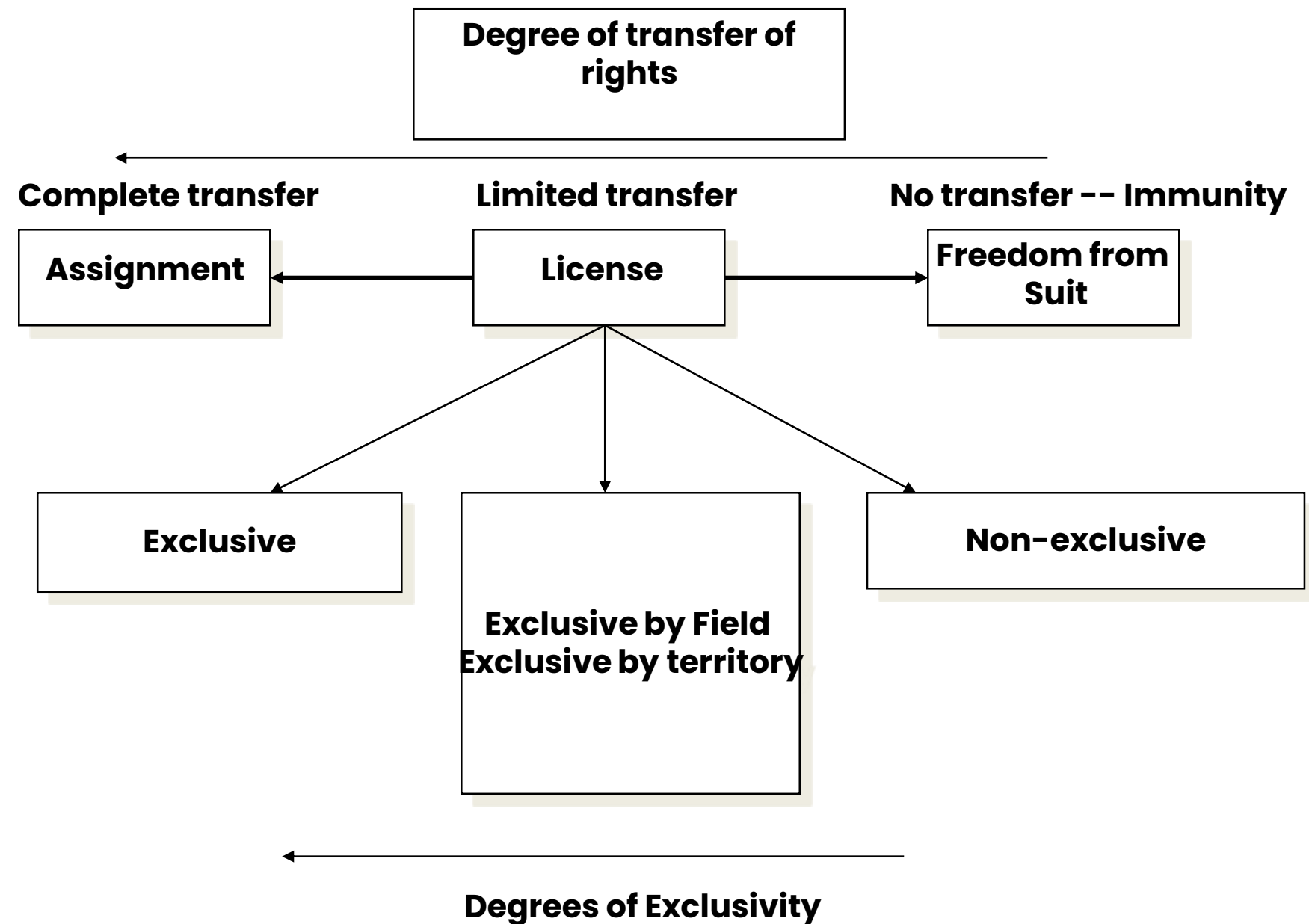


The “WHEREAS” clauses

- **Establish the background to the current agreement**
- **Establish the purpose and objectives of the parties**
- **Non-Binding**

- » **Defined terms are either Capitalized or ALL CAPS**
- » **A section of Definitions – either Article I or an Appendix**
 - » **Licensed Patents shall mean**
- » **Some terms are defined in the text**
 - » **In parentheses and quotation marks**
LICENSE AGREEMENT dated as of June 30, 2012 (the “Effective Date”), by and between Trustees of Boston University (the “University”) and
- » **Complex agreements can have 200 defined terms and run to 120 pages**
 - » **University licenses are generally simpler**
 - » **20–30 defined terms and 20–30 pages**

Different Degrees of Rights Can be Granted



License Grant

- » **University hereby grants an Exclusive License to make, have made, use, have used, sell, have sold and import Licensed Products under the Patent Rights within the Licensed Field**
- » **Right to grant sublicenses**
 - » **Don't require prior approval of sublicensees**
- » **No exclusivity for know-how ("technology")**
 - » **Some universities don't even license know-how**
 - » **It's in the professor's head**
 - » **Sign a consulting agreement**
- » **Very rarely do universities license trade secrets**
 - » **Everything should be publishable**
- » **May not include rights to improvements**
 - » **Certainly time limited**

Licensed Patents

- » **What the rights are being granted to**
- » **Identified by number and title**
- » **Mechanism to capture continuations, continuations-in-part and foreign counterparts**

Licensed Field / Field of Use

- » The subset of all the possible uses of the technology that the Licensee is getting rights to
 - » State what is affirmatively included
 - » State what is affirmatively excluded
 - » e.g., any planned or previously granted fields of use
 - » Reproduce the exact wording of the other affirmative grants
- Licensed Field shall include all products intended for human therapeutic and prophylactic use**

- » The subset of all the possible uses of the technology that the Licensee is getting rights to
 - » State what is affirmatively included
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 - » e.g., any planned or previously granted fields of use
 - » Reproduce the exact wording of the other affirmative grants
- Licensed Field shall include all products intended for human therapeutic and prophylactic use, **excluding any products in which a DNA construct is introduced into a human patient using a viral vector or by direct injection of a DNA construct (“Gene Therapy”)**

» The subset of all the possible uses of the technology that the Licensee is getting rights to

» State what is affirmatively included

» State what is affirmatively excluded

» e.g., any planned or previously granted fields of use

» Reproduce the exact wording of the other affirmative grants

Licensed Field shall include all products intended for human therapeutic and prophylactic use, excluding any products in which a DNA construct is introduced into a human patient using a viral vector or by direct injection of a DNA construct (“Gene Therapy”) **and furthermore shall exclude all products intended for non-human animal therapeutic and prophylactic use (“Veterinary Uses”)**

- » Don't include more than they can reasonably sell in
- » Major territories:
 - » US
 - » Europe
 - » Japan
 - » China
 - » India
- » Make or sell?

Fees, Royalties and Payments



Licensed Products

- » **Either identified by name**
 - » **If licensed at a late stage when products are known**
 - or**
- » **Covered by a Valid Claim of a Licensed Patent**
 - or**
- » **Any product which would, but for the license granted hereunder, infringe a Valid Claim of a Licensed Patent**
 - » **Legally defined under the Patent Statutes (USC)**

Patent Prosecution and Infringement

- » **University controls prosecution**
- » **Reimbursement of patent expenses**
 - » **Law firm bills university**
 - » **University bills licensee**
- » **Exclusive Licensee will want first right to sue for infringement**
 - » **University must join the suit**
 - » **We keep enough rights that exclusive licensee doesn't have standing to sue on their own**
- » **Infringement costs paid by the company**
 - » **Recovery distribution – (10% – 25% to University)**
- » **University has second right to sue**
 - » **Keeps all proceeds**
- » **Non-Exclusive licensee has no right to sue**

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Obligations of the Parties

Reports

- Product Development

- Due diligence

- Product sales and Royalty payments

Records for auditing

- Right to audit

Diligence

- If you license exclusively, the licensee is your only hope for revenues

- Best efforts to develop and commercialize Licensed Products

- “Best efforts” is a legally defined term

- Specific milestone events

- Date

- May have payments associated

- Manufacture substantially in the U.S. (for U.S. sales if excl. license)

- Bayh-Dole requirement

- Patent / Copyright / Trademark notices

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Representations and Warranties

- » **The guarantees**
- » **Universities only represent that they have title to the Patent Rights**
 - » **Not even complete title**
 - » **May be additional inventors**
- » **No other representations are made by the university, including:**
 - » **Infringement of third party patents**
 - » **Viability of technology**
- » **Disclaimers of liability have to be in ALL CAPS and no smaller than 12 point**
 - » **UCC requirement**

Indemnification and Insurance

- » **Licensee accepts all liability for their use, and any sublicensee's use of Licensed Products**
- » **Licensee must indemnify the University**
- » **Product and other liability insurance is usually required**
 - » **Large companies self-insure**

Case Study:

- » **Memorial Sloan Kettering / Oclassen / Eli Lilly / Fialuridine / Hepatitis B**

Confidentiality and Publication

- » **Reports, patent prosecution and other information exchanged will be confidential**
- » **University retains the right to publish its research related to the Patent Rights**

Term and Termination

Term of the License

Longer of:

- Life of the last to expire patent included within Patent Rights

- Expiration of any regulatory exclusivity (if healthcare)

- 10 years from first commercial sale

on a country-by-country basis

- Licensee is free to terminate the license at their option

- Can't force them to continue to invest if they don't want to

- Termination fees might be required

- Or return of the product including all the know-how they've created

- Compensation for consumption of the patent life

- Termination by the University for breach and bankruptcy only

- Sublicenses in good standing continue, with Licensor replacing licensee

- Fully paid-up perpetual license after expiration of royalty term

Dispute Resolution

- **“Summit Meeting”**
- **Mediation**
- **Arbitration**
- **None – straight to Court**
- **International agreements usually specify arbitration**
 - **ICC Rules**
 - **WIPO Rules**

- » **Notice**
- » **Use of Name**
- » **Governing Law**
 - » **New York State a very popular choice for international agreements**
- » **Assignment**
 - » **With or without permission**
 - » **Acquiror of the entire company**
 - » **Of the entire business line**

EXTRACTING VALUE THROUGH A LICENSE

How Do We Divide Up the Value of the Technology Between Licensor and Licensee?

- » **Valuation in licensing is a whole separate topic**
- » **As a general proposition, when you transfer a technology:**
 - **The developer of the technology (the licensor) stops investing in it**
 - **Wants to get a return on the investment they've made**
 - **The licensee starts investing**
 - **Takes on the investment risk going forward**
 - **They get the bulk of the return**

The Goldscheider Principle (aka the 25% Rule)

“The Licensor should receive 25% and the Licensee should receive 75% of the pre-tax profits from a licensed product”

The 25% Rule

- » **Based on empirical observations**
 - » **18 worldwide licenses by Swiss subsidiary of US TV company PhilCo starting in 1959**
 - » **Complete IP portfolio – patents, ongoing know-how, trademarks, copyrighted product materials**
 - » **Licensees made ~20% pre-tax profit, paid 5% royalty; were either #1 or #2 in their market despite strong competition**
 - » **3 year term, so readily renegotiable if terms inappropriate**
 - » **Happily renewed the licenses**
 - » **Concluded that the licenses resulted in successful, long term win-win relationships**
- » **Applicable to fully enabling technology**
 - » **Need to prorate if other IP also needed**
- » **Applied to fully-loaded pre-tax profits, not gross margin**

» Expressed as a % of net sales in license
Royalty rate = 25% x expected pre-tax profit margin

» Example for a patent that fully enables the product:
\$200 sale price
\$100 Cost of Goods Sold (COGS)
\$50 SR&A
\$50 Pre-tax Profit

Patent owner share: $0.25 \times \$50 = \12.5

Royalty = $\$12.5 / \$200 = 6.25\%$

If patent 75% enables product: Royalty = 4.69%

If patent 50% enables product: Royalty = 3.13%

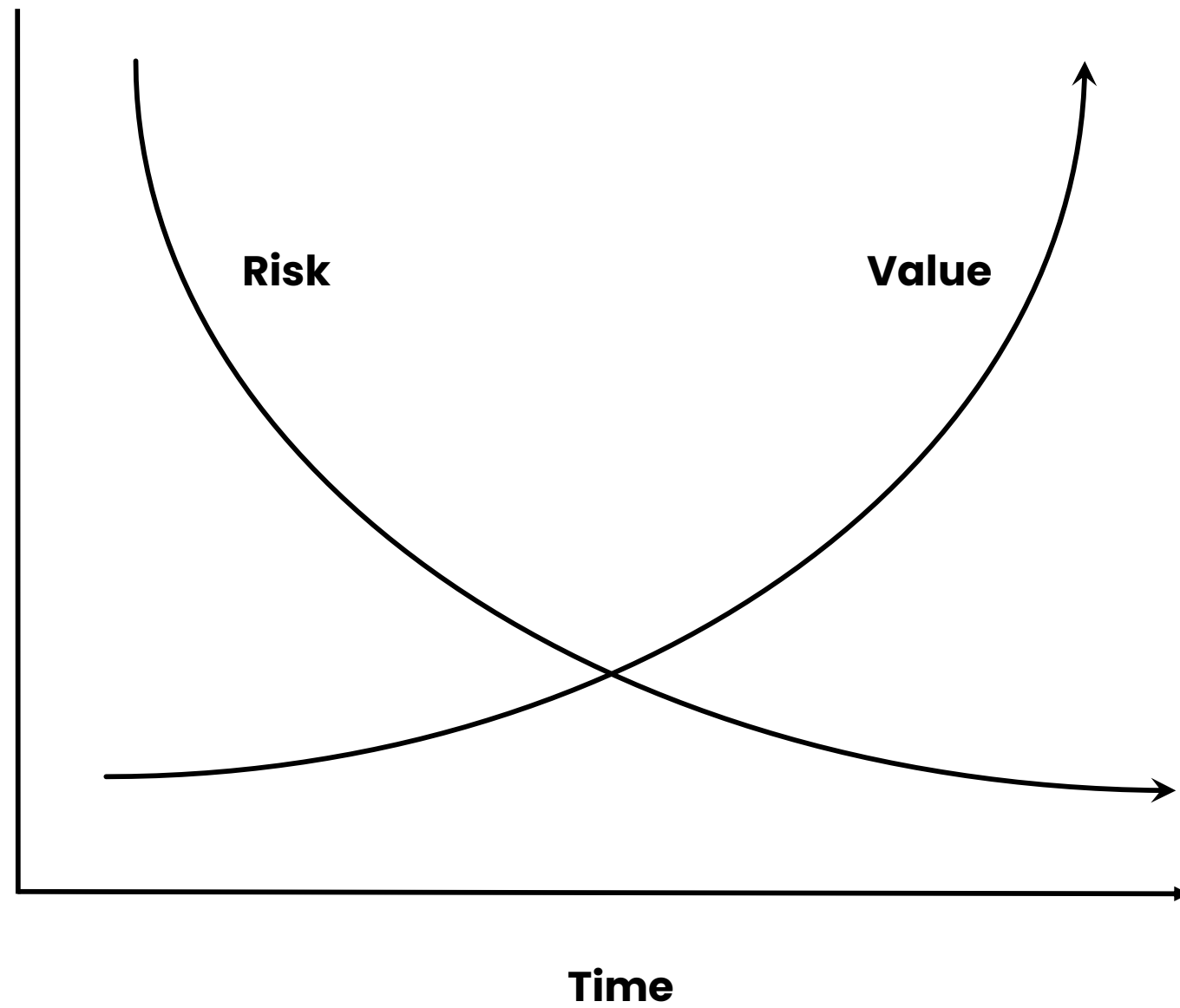
If patent 10% enables product: Royalty = 0.63%

Application

- » Expressed as a % of net sales in license
 - » But almost never the final rate agreed to
- » Adjusted according to “enabling value” (%)
 - » Typically after analysis of:
 - » Manufacturing cost,
 - » Market pricing dynamics
 - » Value-add by licensee....
- » Adjusted according to “enabling value” (%)
 - » 4.5% not 4.69%
 - » 3.0% not 3.13%
 - » 0.5% not 0.63%
- » Limited value in academic licensing negotiations because of early stage
 - » Incomplete cost data available
 - » Very helpful when you’re licensing to a new industry

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Value vs. Risk



A Fundamental Principle of License Valuation

- We probably shouldn't even TRY to get paid upfront in full
- Our job is to EXTRACT the value over time
- Share in the growth in value

Example: Gatorade

- In 1963, Robert Cade of U. FL offered Stokely van Camp the rights* for \$1 million
- Stokely van Camp declined
 - Said the test market would cost \$1 million, paying Cade \$1 million would double their financial risk
 - Offered to pay royalties
- Stokely van Camp declined
 - UFL gets 20%
 - Cade Trust gets 80%

* Rights consisted of patent applications, trade secret formula and trademark

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Where is Value Extracted in a License?

- » **Upfront fee**
- » **Ongoing pre-commercial payments**
 - » **Patent costs**
 - » **Milestone payments**
 - » **Annual Minimum Royalties**
- » **Research collaboration and support**
- » **Sublicense income sharing**
- » **Earned royalties**

Royalty Payments

- » **Three basic types of payment:**
 - » **Fixed lump sum payments**
 - » **Single payments we get as long as the license is in effect**
 - » **Upfront fee, annual maintenance fee, annual minimum royalties**
 - » **Contingent lump sum payments**
 - » **Single payments we get if certain things happen**
 - » **Patent milestones, development milestones, sales milestones, equity liquidation, sublicense payments**
 - » **Share the increase in value of the technology as it's developed**
 - » **Running royalties**
 - » **Payments that depend on the extent of licensee's use of the licensed technology**
- » **Some payments are made pre-commercialization, some after**

Upfront Payments

- » **Cash fee**
 - » **Includes sunk patent costs**
 - » **Reflects the initial value of the technology being transferred**
 - » **Typically relatively low for academic technologies**
 - » **A NewCo may only be able to pay in stock**

Ongoing Pre-Commercial Payments

- » **Patent costs**
- » **Milestone payments**
 - » **Reflects increase in value of technology to licensee as they make progress**
 - » **Common with life sciences inventions**
 - » **Clinical development milestones**
 - » **Patent milestones**
 - » **Sales milestones**
- » **Annual Minimum Royalties**
 - » **Due diligence mechanism**
 - » **Typically escalate substantially after 3 or so years**
 - » **More common with physical sciences inventions**

Sublicense Income Sharing

- **Really important – with a start-up, this may be where the real value is created**
- **Challenge is that this is being negotiated years before the sublicense happens**
 - **Parties don't know how the sublicense will be structured**
- **University's objective will be to ensure that the licensee can't game the system by structuring the sublicense to minimize what it pays the university**
 - **Solution: University gets a piece of every payment that the licensee gets from the sublicensee**

You will pay me every which way there is

Louis P. Berneman

- **Exclusions for items for which there is a deliverable, and are documented in itemized accounts:**
 - **Research support payments**
 - **Purchases of equity**

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Sublicense Income Sharing

Three models:

Pass Through

- University gets same running royalty on sublicensee's sales, as if the licensee sold the product; plus
- A set percentage of every payment received other than running royalties (sometimes termed "non-royalty income")

Allocation

- University gets a set % of every payment the licensee gets from the sublicensee
- Including running royalties

Tiered Allocation

- University gets a lower % of payments received from sublicensee, before commercialization
- University gets a higher % of running royalties after commercialization
- Percentages may be based on timing of sub-licensing after license execution (e.g. year 1-25%, year 2-20%, year 3-15%)
- Or stage of clinical development (i.e., licensee investment)

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An Example – mRNA Vaccines

- **Aka Moderna and Pfizer / BioNTech**
- **Key enabling technology is the 2005 Weissman / Karikó substitution technology**
 - uridine → pseudouridine
 - cytidine → 5-methylcytidineone
- **Penn filed patents in 2006**
- **Weissman and Kariko founded RNARx in 2007**
 - **Got \$97,396 SBIR**
 - **Got further \$900,000 SBIR**
 - **Ceased operations in 2013**
 - **Didn't license the Penn patents**
- **Penn licensed Cellscript / mRNA Ribotherapeutics in Wisconsin**
 - **\$300,000 upfront**
 - **mRNA Ribotherapeutics sublicensed Moderna and BioNTech**

An Example – mRNA Vaccines

License terms

	<u>Moderna</u>	<u>BioNTech</u>
Upfront	\$75 million	
Milestones	\$25 million	\$26 million
Running royalty rate	3.5%	Low-to-mid single digits

Moderna paid \$641 million in 2021

Pfizer's sales were ~2x Moderna's
Total royalties ~\$2 billion

Penn's royalty income:

2020 \$30.6

2021 \$310.2

2022 \$1,258.6

2020 \$30.6

An Example – mRNA Vaccines



- They get 30% of the income
- Plus 12.5% for research
- And they won the 2023 Nobel Prize for Physiology or Medicine!



Running Royalties

- » **Aka “Earned Royalties”**
- » **The main post-commercialization economic component of the license**
 - » **Biggest long-term impact if the product is successful**
- » **An equation:**
 - Royalty payments = Royalty base * Royalty rate**
 - » **Payments are made for the Royalty Term**

Royalty Base

- » **Measure of the extent of licensee's return from using the technology**
 - » **Number of units sold**
 - » **Sales**
 - » **Profits**
 - » **Define very, very carefully**
 - » **Gross Profits / Net Profits / Profits after taxes**
 - » **Very difficult (and expensive!) to audit**
- » **Most common is "Net Sales"**
 - » **Gross Sales less either**
 - » **Standard deductions**
 - » **Shipping / Insurance / Returns**
 - » **Or a standard deduction – typically 2% or 3%**

- » **How much of the licensee's return from using the technology we get**
- » **Royalty rate can be either:**
 - » **Flat**
 - » **Single royalty rate for all sales**
 - » **Tiered**
 - » **Royalty rate is different at different levels of sales**
 - » **Basic marketing theory says that bigger selling products are more profitable**
 - » **Basic royalty theory (25% Rule) says royalty rate should therefore increase at higher sales levels**

Royalty Term

- » **How long we get paid**
 - » **Universities usually use:**
 - » **Last to expire patent on a country-by-country basis**
 - » **Companies frequently use:**
 - » **Longer of:**
 - » **Last to expire patent; and**
 - » **Expiration of regularity exclusivity; and**
 - » **Ten years from first commercial sale**
 - » **Or more**
 - » **Negotiate!**
 - » **12-15**
- on a country-by-country basis**

Royalty Term

- » **Why don't more universities use this formulation?**
 - » **Need a royalty step down after patents expire**
 - » **Kimble decision (2015) reaffirming Brulotte (1964)**
 - » **50% traditional**
 - » **10-25% meets the test**
- » **Currently working on a case where CoM patent filed in 1970's**
 - » **New use discovered in 1990's**
 - » **FDA approval received 2019**
 - » **Poorly worded**
 - » **We'll see what the Court decides**
- » **I see corporate licenses with no step down**
 - » **Unenforceable in Court**
 - » **But done**

Example

»»	License issue fee	\$50k
»»	Annual minimum royalties	\$10k yrs 2-4 \$25k yrs 5-7 \$50k thereafter
»»	Milestone payments	\$50k yr 3 \$100k yr 4 \$250k yr 5 \$500k yr 6
»»	Royalty rate	5%
»»	Sunk patent costs	\$75k
»»	Annual patent costs	\$10 – \$25k

Product Sales

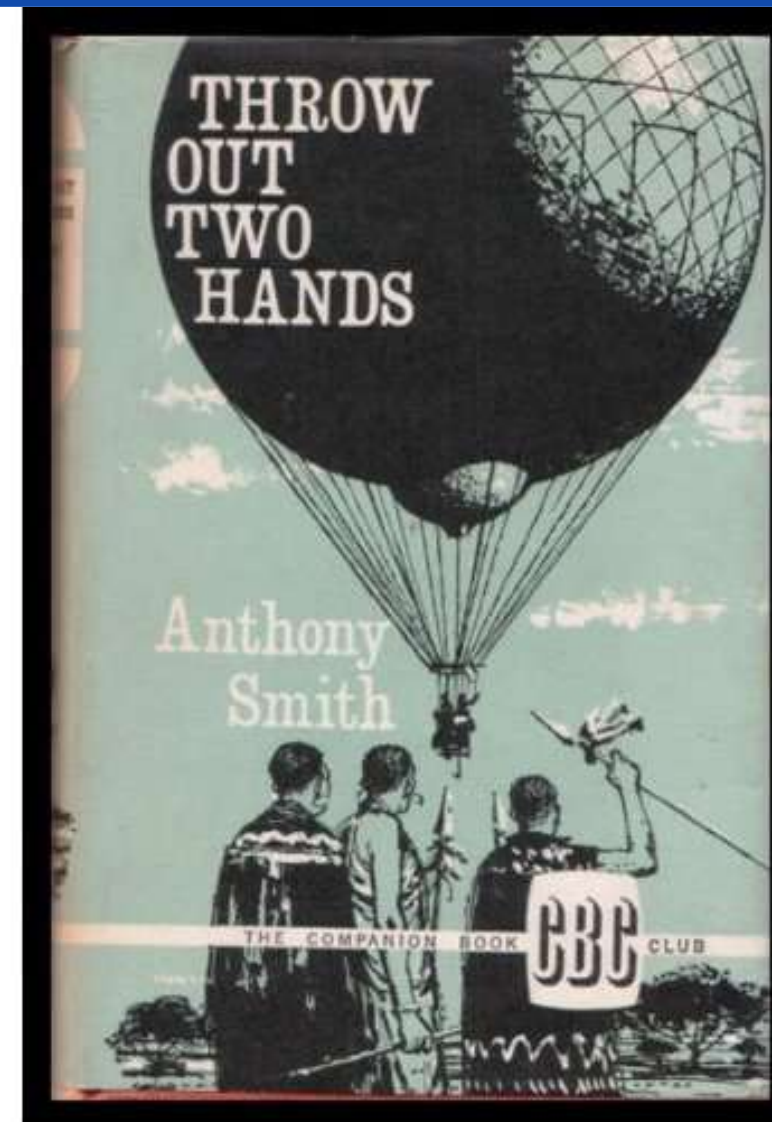
<u>Year</u>	<u>Product Sales</u>
7	\$750,000
8	\$3,000,000
9	\$5,000,000
10	\$10,000,000
11	\$15,000,000
12	\$20,000,000
13	\$25,000,000
14	\$25,000,000
15	\$25,000,000
16	\$23,000,000
17	\$21,000,000
18	\$19,000,000
19	\$17,000,000
20	\$15,000,000

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BEST PRACTICES / LESSONS LEARNED

Best Practices / Lessons Learned

- » **Start with a good template**
 - » **Need a royalty step down after patents expire**
- » **The licensor should do the first draft, starting from the template**



“The safety rules of ballooning are essentially a recapitulation of the accidents that have happened”

“The safety rules of licensing are essentially a recapitulation of the accidents that have happened”

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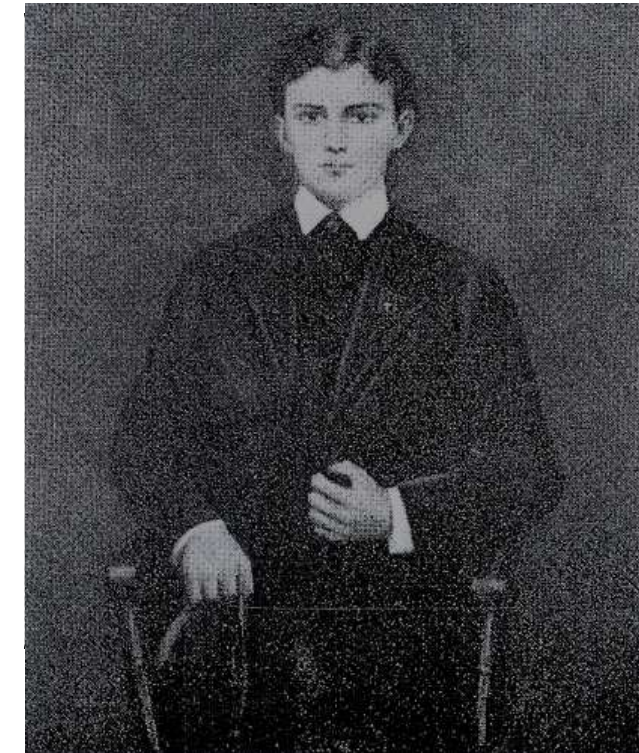
Example: Listerine

- » **Invented in 1881**
- » **Dr. John Lawrence, St. Louis, MO**



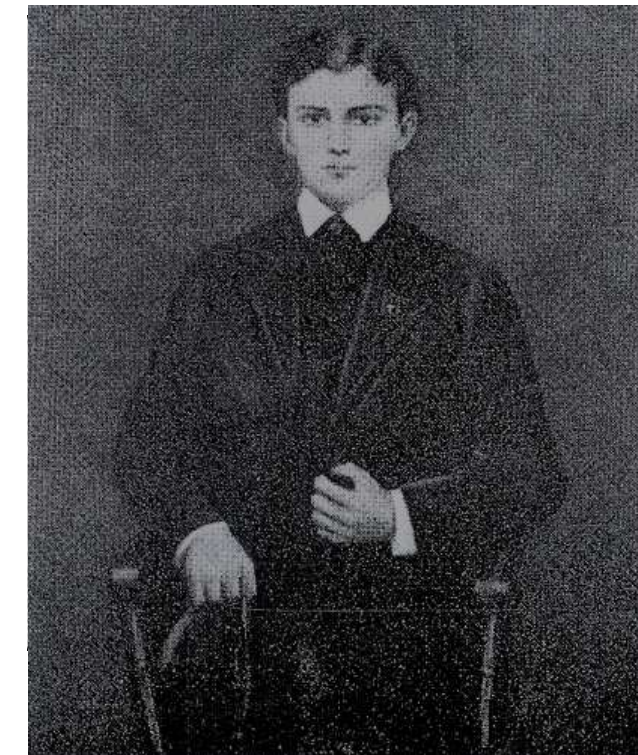
Example: Listerine

- » **Invented in 1881**
 - » **Dr. John Lawrence, St. Louis, MO**
 - » **Licensed to pharmacist, Jordan Lambert**



Example: Listerine

- » **Invented in 1881**
 - » **Dr. John Lawrence, St. Louis, MO**
 - » **Licensed to pharmacist, Jordan Lambert**
 - » **Trade secret formula**
 - » **Founded Lambert Pharmacal Company**



Entire Agreement

Know all men by these presents, that for and in consideration of the fact, that Dr. J. J. Lawrence of the city of St Louis Mo has furnished me with the formula of a medicine called Listerine to be manufactured by me, that I Jordan W Lambert, also of the city of St Louis Mo, hereby agree for myself, my heirs, executors and assigns to pay monthly to the said Dr. J. J. Lawrence his heirs, executors or assigns, the sum of twenty dollars for each and every gross of said Listerine hereafter sold by myself, my heirs, executors or assigns. In testimony whereof, I hereunto set my hand and seal,

Done at St Louis Mo. this the 20th day of April, 1881

Jordan W Lambert (Seal)

Example: Listerine

Invented in 1881

Dr. John Lawrence, St. Louis, MO

Licensed to pharmacist, Jordan Lambert

Trade secret formula

Founded Lambert Pharmacal Company

Formula accidentally published prior to 1949

Lambert merged with Warner-Hudnut in 1955 – Warner-Lambert

Stopped paying royalties

Trade secret they had bought was no longer a trade secret

Heirs sued

Judge agreed:

Agreement says: “As long as you sell, you pay”

Doesn’t say: “As long as it’s a trade secret you pay”

J&J still paying royalties

You can buy the rights to receive royalties on Listerine!

LICENSING VS. ASSIGNING

Licensing vs. Assigning

- » In U.S., we don't assign
 - » Bayh-Dole Act doesn't allow us to without permission of the Funding Agency
 - » Won't give it
- » Other countries don't have this protection
 - » Can come under pressure to assign
- » Can write an assignment agreement with same payment terms as a license
 - » Upfront and contingent / success based
- » Difference is in the balance of power if things go wrong
 - » Licensor can terminate unilaterally
 - » Licensee may sue to prevent
 - » An assignee has to agree to assign back

Licensing vs. Assigning

- » If you have no choice but to assign
 - » “*Do you want me to invest in your spinout or don’t you....?*”
- » Then only assign when commercial success is assured
 - » Initially license
 - » Agree to assign when:
 - » The company gets acquired by a major company
 - » Define what’s a major company
 - » Market capitalization
 - » Revenues
 - » The company completes an IPO on a major exchange
 - » The company’s revenues(s) from the licensed products hit an agreed target
 - » Maybe include an assignment fee / exit fee

QUESTIONS?



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



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<https://www.venturecenter.co.in/>



<https://www.techtransfer.online/>



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