

Technology Transfer

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UMKC Office of Technology Transfer

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Bayh-Dole Act

Adopted in 1980

Purpose: Get government funded research to the public.

Allows Universities and non-profits to own the intellectual property resulting from federal grants.

Requirements:

- Report disclosed inventions to the funding agency
- Elect to retain title in writing within a statutorily prescribed timeframe
- File for patent protection
- Grant the federal government a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced on its behalf throughout the world
- Actively promote and attempt to commercialize the invention
- Not assign the rights to the technology (some exceptions apply)
- Share royalties with the inventor
- Use any remaining income for education and research
- Give preference to U.S. industry and small business



What is Technology Transfer?

What We Do:

- Identify new technologies in the University
- Protect technologies through patents and copyrights
- Market and license the technologies
- Handle agreements that deal with intellectual property

Our Office

4747 Troost

Technology Transfer was centralized in Columbia until ~2007

1/3 employee until 2010

Patent budget paid for by System

- Originally UMKC was transferred our patent budget of \$75,000-\$100,000
- Now all campuses share in a patent fund
- UMKC ~\$40,000-60,000/year unreimbursed
- More filings but more reimbursements should keep this somewhat steady

Identify New Technologies

Educate faculty on Intellectual property

Raise technology transfer awareness on campus

Promote and facilitate Industry/Researcher relationships

- Industry sponsored research
- STTR/SBIR grants

Purposes

- Increase quality invention disclosures
- Increase research funding
- Limit “lost” IP



Intellectual Property

What is the Difference between a patent, a copyright, and a trademark?

Patents- Useful inventions of applied technology.

Examples: Pharmaceuticals, Medical Devices, Machines

Copyrights- Original works of authorship that are fixed in tangible medium.

Examples: Books, Movies, Songs, Sculptures, Paintings.

Trademarks- Words, symbols or other designations that serve to identify the source of goods or services.

Examples: Apple



McDonalds



Nike



UMKC



Intellectual Property

Examples that we handle:

Patents

Software, Compositions of Matter, Medical Devices, Other Devices/Machines

Copyrights

Software

Trademarks

A few select Trademarks- Sourcelink, Extension programs, limited technologies, etc..

Trade Secrets

Almost impossible inside the university

Protect Technologies

Once we have received an invention disclosure:

IP analysis - Look at prior art, freedom to operate, etc..

Many times the prior art is our own publications.

Market analysis – Size of market, barriers to entry, upfront costs, competition, cost of manufacturing, etc..

In other words: Can we obtain a reasonable ROI if we decide to protect the intellectual property?

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Commercialization

- Move the technology out of the University

Ways to accomplish this:

- License to an established company
 - exclusive or non-exclusive
- License to a start-up company
- License to a faculty start-up company
- Further sponsored research by outside company (normally with an option agreement)

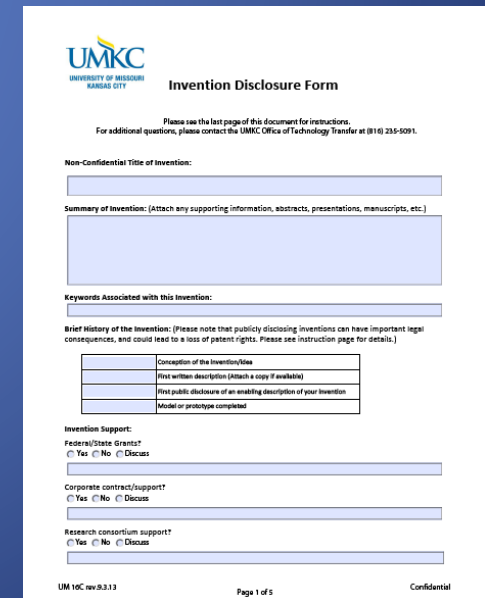
Our Process

In order to start the technology transfer process, there **must** be an original copy of the signed Invention Disclosure Form on file.

The Invention Disclosure Form is available on the UMKC TTO website.

Some information required in the Form:

- Summary of the technology
- Funding sources
- Previous and upcoming publications
- Inventors and contribution percentages



The image shows a screenshot of the UMKC Invention Disclosure Form. The form is titled "UMKC UNIVERSITY OF MISSOURI KANSAS CITY Invention Disclosure Form". It includes instructions to read the last page for instructions and to contact the UMKC Office of Technology Transfer at (816) 235-5091 for additional questions. The form contains several sections with input fields:

- Non-Confidential Title of Invention:** A text input field.
- Summary of Invention:** A text input field with the instruction: "(Attach any supporting information, abstracts, presentations, manuscripts, etc.)".
- Keywords Associated with this Invention:** A text input field.
- Brief History of the Invention:** A text input field with the instruction: "(Please note that publicly disclosing inventions can have important legal consequences, and could lead to a loss of patent rights. Please see instruction page for details.)".
- Table:** A table with 2 columns and 3 rows. The first column is for the user to enter information, and the second column is for the form to record the date. The rows are:

	Conception of the Invention/Date
	First written description (attach a copy if available)
	First public disclosure of an enabling description of your invention
	Model or prototype completed
- Invention Support:**
 - Federal/State Grants?** Yes No Discuss
 - Corporate contract/support?** Yes No Discuss
 - Research consortium support?** Yes No Discuss

At the bottom of the form, it says "UM 19C rev.9.3.13 Page 1 of 5 Confidential".

Next Steps

IP Analysis

Can we obtain meaningful IP protection? If we cannot, we will offer a waiver, put the disclosure on hold for further research, or in some rare instances market without IP protection.

Commercial Analysis

What is the likelihood that we will be able to license the technology at our research end point?

Next Steps

Marketing

Create marketing materials and contact potential licensees.

Licensing

Negotiate legal and business terms for a license

Some commonly negotiated items

- Fields of use
- Territory
- Exclusivity
- Up-front fees
- Royalties
- Milestone and Maintenance fees
- Milestones
- Equity
- Sublicense fees

Post-License Issues

Our Numbers

Invention Disclosures

Average ~30/year

Up from ~6/year in 2009

Patents

~3 Non-provisional or PCT applications per year

~10 provisional applications per year

Projected Agreements FY14

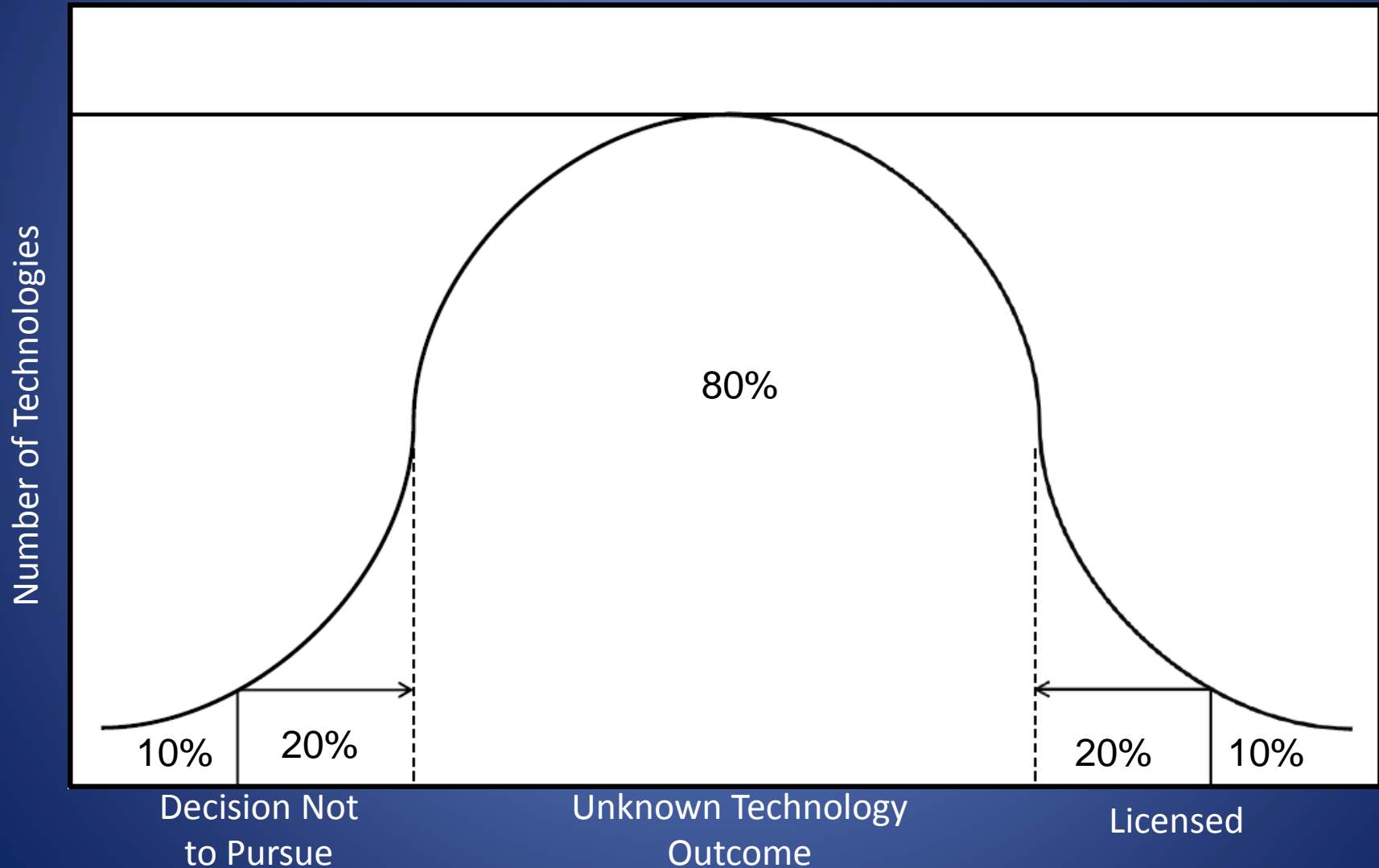
MTA's: >90

NDA's: >25

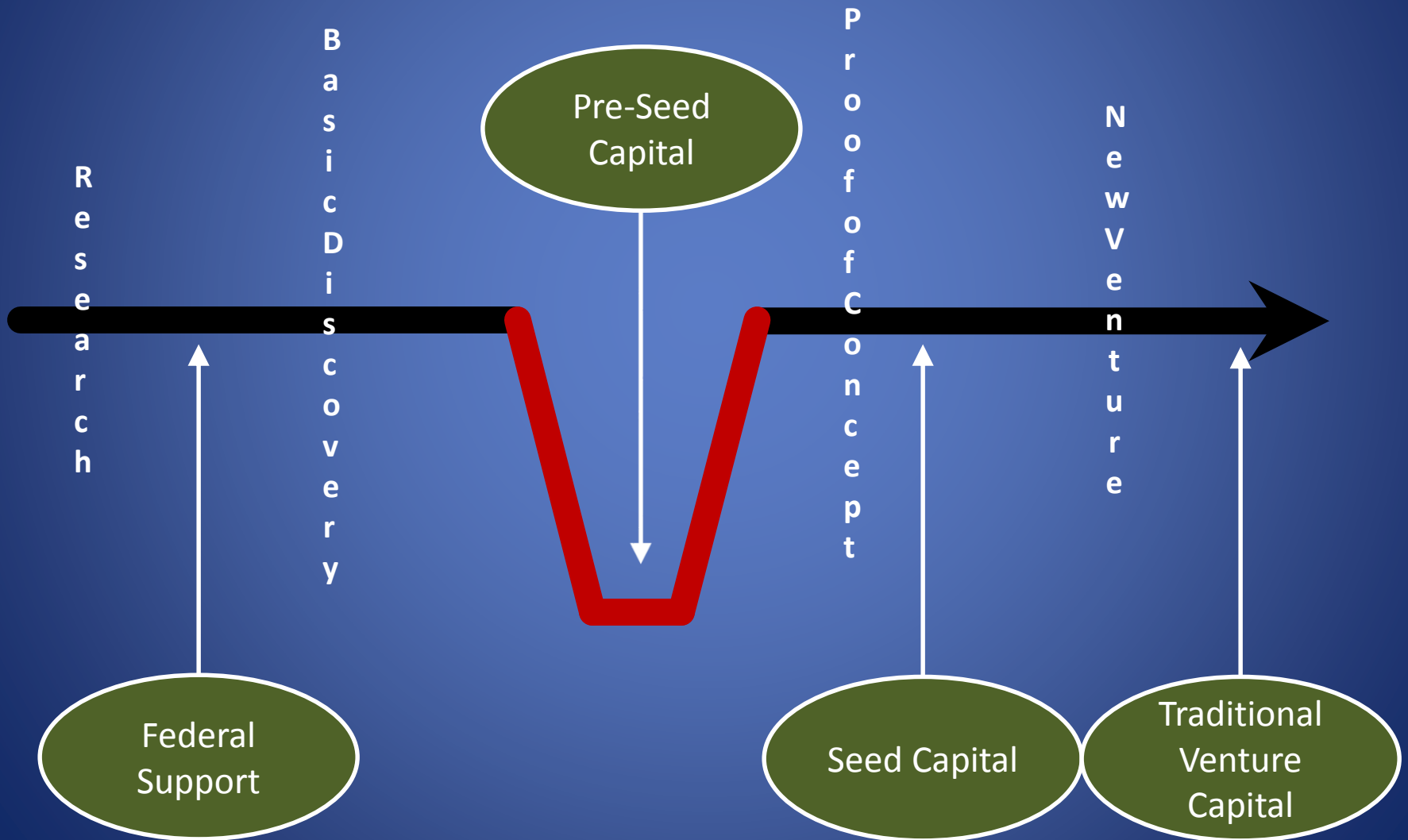
Options and Licenses: >5

Other Agreements: >100

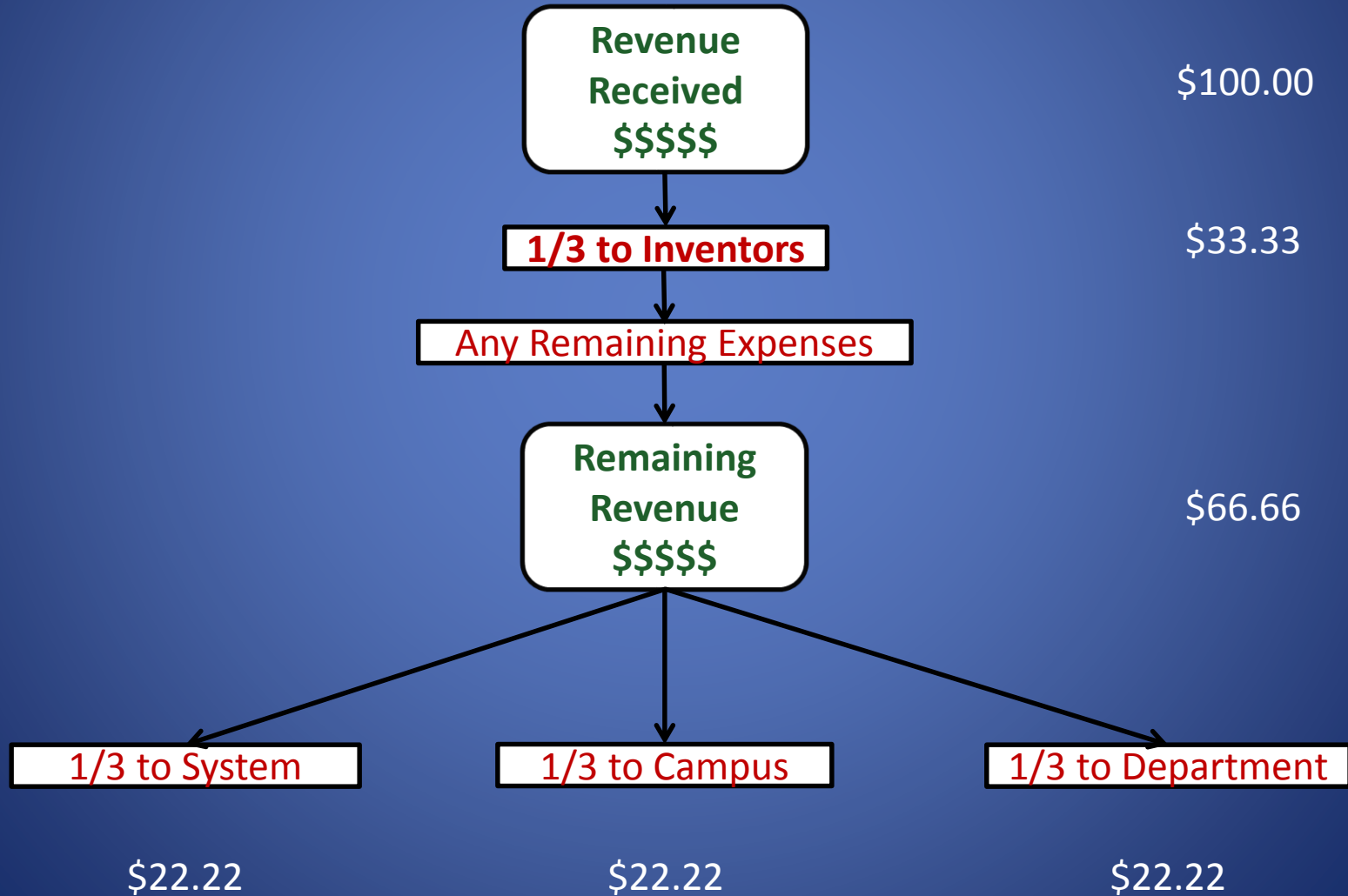
Technology Outcomes



“Valley of Death”



Patent Revenues

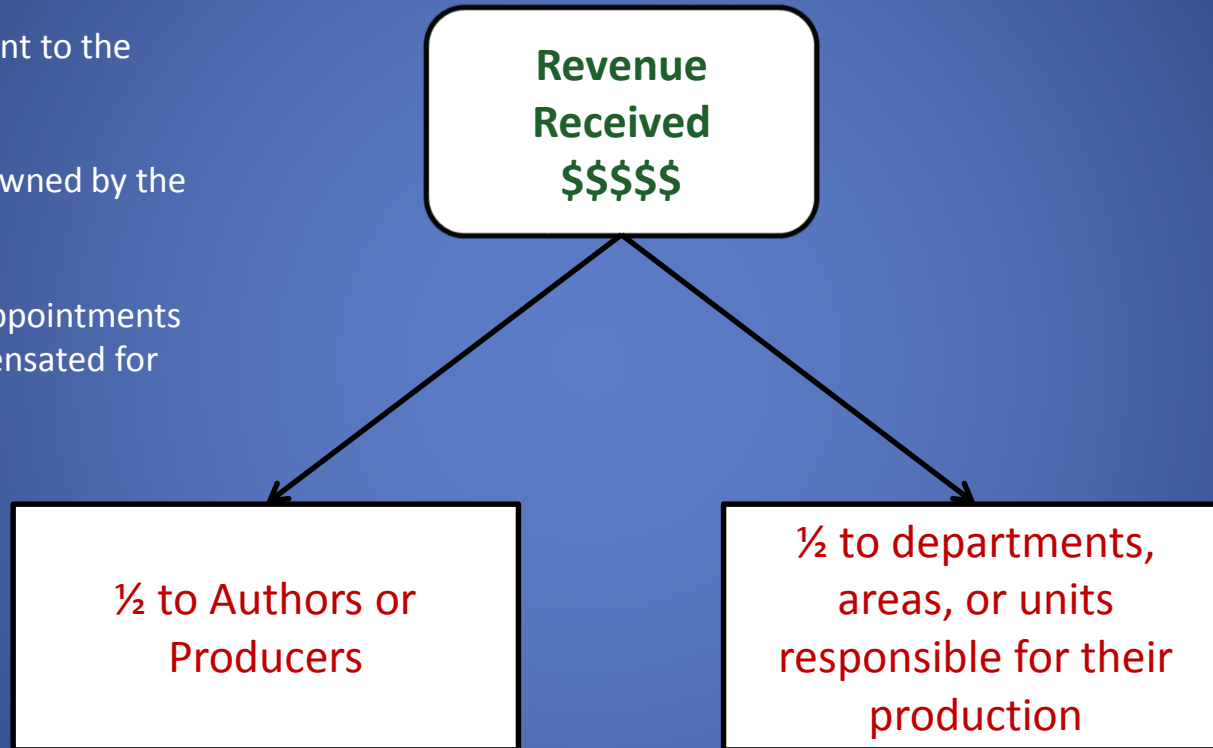


Copyright Revenues

*Absent an agreement to the contrary

**Copyright works owned by the university

***Non-academic appointments are not compensated for software



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