# University Technology Transfer Process and University Libraries

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May 19, 2022 For INCONECSS 2022, hosted by ZBW



#### Poster Outline

- Introduction to University Technology Transfer
- Technology Transfer Process
- Roles of Librarians
- Challenges
- Best Practices

I will introduce topics in three minutes, but explore in more depth in discussion.

#### University Technology Transfer (TT)

"Technology transfer is a term used to describe a formal transfer of rights to use and commercialize new discoveries and innovations resulting from scientific research to another party...[TTO's are responsible for a] wider array of duties including corporate engagement, internal development of inventions, new company formation, and overall economic development" (AUTM 2022).

Terms: Technology Transfer (TT), Technology Transfer Offices (TTOs), Knowledge Valorisation.



Venture Capital Financing in Europe. Created on Dealroom.io, Via Yoram Wijngaarde @yoramdw <u>https://twitter.com/yoramdw/status/1461987131749015555</u>

#### ALL OF THESE NEEDS ARE CAUSING A DYNAMIC DEEP TECH **ECOSYSTEM TO TAKE SHAPE**

While money is one important currency, knowledge, data, skills, expertise, contacts, and market access are also valuable means of exchange for ecosystem players

MONEY

DATA

SKILLS

EXPERTISE

CONTACTS



BCG, Hello Tommorrow. "The Dawn of the Deep Tech Ecosystem"

https://media-publications.bcg.com/BCG-The-Dawn-of-the-Deep-Tech-Ecosystem-Mar-2019.pdf

## Technology Transfer Process

- Funding
- Research and Innovation
- Invention Disclosure Form
- Assessment by TT Office
- Intellectual Property
- Determination of route
  - Licensing
  - Startup

For the purposes of this talk, we will focus on the US and EU

#### University Technology Transfer (TT)

#### Importance:

- Potentially revenue generating, though thus far minor compared to tuition and charitable giving (Cunningham et. al 2020)
- Recruits faculty
- Gaining important in University strategic plans
- Gets innovations out into the world

Universities play an important part of international innovation ecosystem that is continuing to grow, mature, change.

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- Many research teams never reach this step. The "VOID" - Valley of Innovation Death (Leute, 2018). Research shows potential, but it's not ready for commercial use.
- Some researchers choose not to disclose potentially useful and valuable innovations

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 Librarians can act as informational connectors, including acting as informal liaison from TTO's to educators

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- TTO's assess invention disclosures for patentability and business potential.
- Sometimes these offices are staffed by interns(Elliot, et. al 2017),
- A group to potentially train and/or work with.

"Market size, market opportunities, market segmentation, competitive information, science articles, and relevant patents" (Elliot et. al 2017)

"Trade literature, market exploration, [...] target & trend analysis" (Howard 2019).

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## Challenges

- May be outside the scope of library work; pushback from colleagues
  - Cultural differences between business and academia:
    - Mutual incomprehension (Cunningham 2020)
- Materials licensing
- May need expertise from multiple individuals (Elliot 2016)
- Time intensive



- Aligned with University goals
- High impact potential
- Skills needed by these groups are complementary to needs of other entrepreneurs (students, for example)
- If you offer information services to entrepreneurs, the TTO will likely find you! Better to be proactive

#### **Best Practices**

- Know your University's innovation strengths; develop information expertise in those areas
- Target specific groups / offices in the TTO that benefit from training in information literacy, competitive intelligence, and knowledge management
- Know your licenses; align with licensing negotiators
- Scope the work to be in line with organization priorities

# Thank you

Additional information on next slides

- Relevant Open Source Intelligence resources
- Organizations to know
- Further Reading

### **Open Source Intelligence resources**

Think Tanks - Think Tank index https://repository.upenn.edu/think\_tanks/ **Funding Search portals** US: SBBR / STTR https://www.sbir.gov/sbirsearch/award/all **EU: CORDIS** https://cordis.europa.eu/projects/en Government reports **SEC Filings** Google Patent WIPO Patent "Power-searching"



#### Organizations to know

- Horizon Europe, <u>https://www.horizon-eu.eu/</u>
- Competence Centre on Technology Transfer (JRC European Commission), <u>https://visitors-centre.jrc.ec.europa.eu/en/media/leaflets/competence-centre-technology-transfer</u>
- VentureWell, <u>https://venturewell.org/</u>
- Association of University Technology Managers, <u>https://autm.net/</u>
- Praxis Auril, <u>https://www.praxisauril.org.uk/</u>
- European TTO Circle, https://ec.europa.eu/jrc/communities/en/community/tto-circle-community
- OECD Directorate for Science, Technology, and Innovation
- InfoDev, World Bank Group

#### **Further Reading**

- Journal of Technology Transfer, <u>https://www.springer.com/journal/10961</u>
- International Journal of Technology Transfer and Commercialization, <u>https://www.inderscience.com/jhome.php?jcode=ijttc</u>
- OECD Science, Technology, and Innovation Outlook 2021: Times of Crisis and Opportunity <u>https://www.oecd.org/sti/oecd-science-technology-and-innovation-outlook-25186167.</u> <u>htm</u>
- Federal Labs T2 Playbook (US), <u>https://federallabs.org/t2-toolkit/t2-playbook</u>

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