

TECH COMMERCIALIZATION SERVICES

For pancreatic and lung cancer researchers

i Skipper Bio Med LLC is a charitable research consultancy that provides services to preclinical research groups developing promising lung or pancreas cancer theranostics

OVERVIEW OF TECHNOLOGY TRANSFER

i *Purpose:* To transfer federally-funded technologies to another organization for commercialization

What is a patent?

A patent is a document granted by a governing body that confers an exclusionary right to an inventor to make, use, and sell the invention claimed in the patent for a set time period. Goal of the patent prosecution process is to obtain patent claims that would be of value to a commercial licensee, or if you're a startup, to obtain patent claims that provide your business with a sustainable competitive advantage. Patent needs to be:

- **Novel** – must not be described in a prior art reference anywhere in the world
- **Non-obvious** – should demonstrate that the invention produced some “unexpected” result that would not have been anticipated by prior art
- **Useful** – patent claiming therapeutic use in humans can be rejected if there is insufficient data from relevant animal model systems

Joint inventorship: A person is an inventor on a patent if they contributed to conceiving at least one claim on the patent application. They do not have to contribute to all claims to be an inventor.

What is the patent application process?

Patent prosecution: Takes 3-4 years to 7-8 years (for more complex cases) from filing before patent issuance. Patent maintenance fees are paid at 3.5, 7.5 and 11.5 years.

Provisional Patent Applications: The “first stop” in the patent prosecution process (this is not an official patent application but provides quick protection and is much cheaper to file).

- Not examined by the patent examiner
- Must be converted to a non-provisional application within 12 months of the filing date
- Can add additional data developed during the 12-months between filing and conversion

Non-Provisional Patent Applications: The decision to convert is normally driven by two factors:

- There is a strong likelihood the patent will add value to the invention in a way that supports successful commercialization
- The data developed during the year between the provisional and non-provisional filing dates support the case

The odds of successfully obtaining an issued patent are impacted by several factors:

- Prior art density and proximity: How close is the prior art to the invention the applicant is trying to claim?
- The skill, expertise, and diligence of the patent examiner
- The level of inventor engagement
- Specific and comprehensively written provisional and non-provisional patent application

Patent life: The term of a patent is 20 years from the filing date of the earliest non-provisional U.S. patent application.

Who files patent applications at universities?

There are two key players involved in the patenting process:

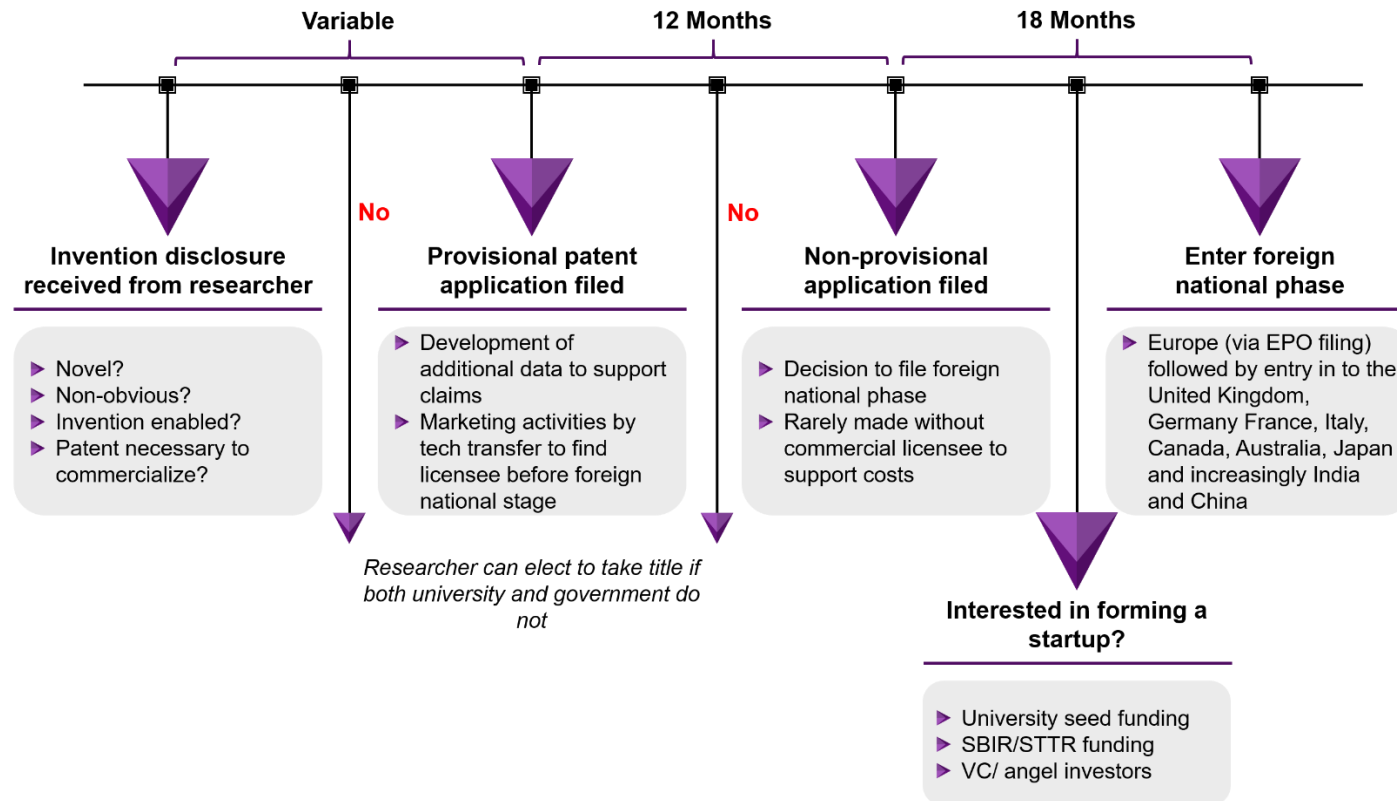
Tech transfer office: Generally, a licensing associate/ manager assigned to handle specific departments or subject matter will work with investigators to assess, market and license inventions/ intellectual property.

Patent legal counsel: Many universities hire outside law firms to handle patent prosecution once a decision to move forward with the invention is made by tech transfer. These firms generally have technical expertise with the invention but will still require investigator input to write a comprehensive patent application.

What happens after the patent is granted?

License agreement: An agreement that grants a third party (the licensee) a package of rights to allow them to use an intellectual property asset for specific purposes. Good agreements often incorporate targeted timelines for the achievement of developmental milestones by the licensee. Does not prevent licensed intellectual property from being used for non-commercial academic research, teaching, and patient care purposes.

License revenue/ royalty: ~40% of net license revenue will go to inventors (percent varies by institution)



CHALLENGES FACING THE TECH TRANSFER PROCESS

i Tech transfer offices have limited time and handle several activities. They rely on investigators to actively engage throughout the process.

We will act as a liaison to overcome bandwidth challenges on both ends and provide tailored recommendations

Our Solutions

Tech Transfer Offices

We provide the following services:

- ▶ **Patentability assessment** – We can arrange confidential preliminary assessments
- ▶ **Marketability assessment** – We can provide market assessment and competitive analysis to assess commercial potential
- ▶ **Licensing partners** – We can set up connections with potential industry partners

Researchers

We recommend submitting invention disclosures and engaging with the tech transfer office as early as possible. An invention may not get converted to a patent due to several factors outlined below and we can help in the following ways:

- ▶ **University's research interests** – We have connections with IP firms to help patent applications if you take the title
- ▶ **Other university specific issues** – We have conducted primary research illustrating differences in tech transfer practices across universities
- ▶ **Company formation** - We have identified several resources to enable your research to transition into a startup

Companies

- ▶ We can help educate companies and craft an **IP strategy**
- ▶ We can do a **preliminary FTO analysis**
- ▶ We can identify and evaluate **strategic licensing opportunities**