

TECHNOLOGY TRANSFER AT THE UNIVERSITY OF TENNESSEE: INVENTIONS AND DISCLOSURES

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Recombinant DNA







NORTHWESTERN UNIVERSITY

Innovation

BROAD











Moving knowledge and inventions from UT to an external partner to create products for public benefit

Our MISSION

- Protect, manage and <u>commercialize UT inventions</u>
- Support UT research
- Support an <u>entrepreneurial culture</u>
- Contribute to regional economic development



The GOAL is to find a suitable partner for viable inventions

- <u>Strongly committed to developing a product.</u>
- Having the necessary *financial and staffing resources*.
- <u>Willing to pay the university a fair price.</u>



SO WHAT?

Why does this matter to the university and inventors?

- Benefit to the society from innovative technologies
- Direct financial rewards to inventors and university
- Industry partnerships can provide access to funding, special technology or equipment, and grad student training and later employment
- A license agreement is often the beginning of a strategic alliance with industry partners.





IMPACT OF "TECHNOLOGY TRANSFER"?



UTRF SERVICES





Invention evaluation

Patents, copyrights, & trademarks



Technology marketing



negotiation











Educational seminars



Sponsored research partnerships

Royalty collection & distribution

WHAT ARE THE COMMERCIALIZATION RESULTS?

- In FY15 FY17 (HSC only):
- 113 new invention disclosures
- 98 patents filed
- 32 patents issued
- 21 new license and option agreements
- 4 new start-up companies
- \$2.02 million in license-related revenues collected



UT ROYALTY SHARING

• UTRF covers all expenses (patents, legal fees, marketing); no money is ever asked of the inventor.

Revenue Sharing Distribution

Revenue	Inventor	Campus	Department	UTRF
1 st \$5000	100%	0%	0%	0%
\$5k-\$1M	40%	15%	15%	30%
\$1M+	35%	20%	20%	25%

The inventor receives 100% of the first \$5000 of gross revenue, but all other distributions refer to net revenue (i.e., after IP costs are subtracted).



WHAT IS AN INVENTION?

Therapeutics (novel or new uses):

- Small Molecules
- Biologics (Peptide)

Delivery Systems:

- Nanoparticles
- Biodegradable Polymers

<u>Research Tools:</u>

- Chemical probes; reagents
- Antibodies
- Cell lines





Medical devices

- Surgical instruments
- Implants

Diagnostic tests

• Biochemical markers

<u>Software</u>

- Medical Apps
- EHR tools







WHEN TO CONTACT UTRF

It is essential to protect your invention <u>before</u> it is presented to the public.

<u>Contact UTRF:</u>

- ANYTIME!
- Before publication in any media
- Before presenting in a meeting or poster session
- When preparing a grant application









WORKING WITH UTRF





Inventor

- Submit invention disclosure via IDEA
- <u>https://idea.tennessee.edu</u>



• Checks for conflicts

UTHSC

- Checks for sponsor's rights
- Assigns rights to UTRF

 Evaluation & Go/No-Go decision

RESEARCH

- Patent application
- Market technology
- Negotiate license
- Collect revenue
- Monitor licensee compliance



UTRF EVALUATION CRITERIA





- Maturity of the invention?
- What data is there on the invention?
- Is the invention in a "Hot" area?
- Is there a prototype?
- Breakthrough or incremental change?





- Novelty: Prior public disclosures.
- **Obviousness**: Is the invention obvious for an average professional in light of existing public knowledge?
- Subject Matter / Eligibility: Is it man-made?



COMMERCIAL POTENTIAL

- Is there a **clear product**?
- Does it solve a significant problem?
- Enabling technology or substitute technology?
- What is the addressable market size?
- What are competitive technologies?
- Who are likely licensees?
- What are legal and regulatory barriers?







- What **future plans** does the inventor have with the technology?
- Funding status for further research?
- •What **industry relationships** does the inventor have?
- Existing relationship with UTRF.





CROSSROADS: WHAT HAPPENS AFTER THE EVALUATION?







TEAMING FOR SUCCESS

Inventor participation is critical for successful licensing or business start-up.

- The inventor is the single most important source of valuable commercialization leads.
- The inventor is the expert.
 - The first thing that companies want to do is to talk to the inventor(s).





LICENSING

License

- Gives permission/rights to another party to use and commercialize
- UTRF retains ownership.
- Inventors reserve the right to practice the licensed technology and collaborate
- Licensees are required to achieve diligence milestones.



We are not just looking for a licensee but a **Partner**!









A grant program providing up to \$15,000 to develop technologies with commercial potential





A TRACK RECORD OF SUCCESS AT UTHSC!





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