

How do I best negotiate with the TTO?

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Without a license to your technology, your spin-off is an empty shell. You need to reach a mutually beneficial agreement with the technology transfer office (TTO) of your academic institution. This can be a little tricky due to the sudden change in roles. The same people who supported you with the patent filing are now your negotiation partners defending the interests of the university. This can be emotionally intense but it is rarely rocket science. It boils down to having a fair amount for academia, without dampening the team's motivation or impairing future funding. Frankly, there is often not that much leeway. Either terms of the license agreement are non-negotiable or there are internal benchmarks – even if often undisclosed - that TT officer will not diverge from much. That said, we have witnessed a lot of frustration on both sides of the table over the years. We are convinced that mutual understanding (see Table 1) and transparency increase ease and speed of these negotiations.

Table 1: **understanding the points of view of founders versus tech transfer officers**

Spin-off founder	Technology transfer officer
High importance	One of many projects
Urgency - delay can lead to loss of opportunities	No time constraints
Highly emotional	Daily business
High financial impact, livelihood at risk	No financial impact, salary paid by institution
First time going through the process, unaware of the process	Many deals per year, fully aware of the process
Limited knowledge of any benchmarks	Full knowledge of local (hence relevant) benchmark
Influenced by feedback and advice from many people with different background	Case discussed mainly within TTO team
Want their company to develop the technology and succeed	Want technology to reach the market, facilitated by any company (while preferring the local company if there are two equivalent potential licensees)

Why do I have to “pay” academia to in-license my own invention?

You may well have contributed to the invention, in which case you are on the patent, and will usually receive royalties. However,

the patent belongs to your academic institution. Consider what the university has invested in your project: your and your collaborators' salaries, materials (including shared facilities), training, overhead, etc. If you have obtained grants, would you have received them working from your garage? Or was funding facilitated by the fact that you have been working in a reputable institution with infrastructure and supervision?

While the academic institution does not depend on the highly unpredictable (and still rather unlikely) benefits generated by your future spin-off, society and tax payers expect it to negotiate a fair market value for the assets it owns. Maintaining an arm's length relationship ensures that all negotiations are treated equally (not one professor favored over another) and prevents potential conflicts of interest. Even a non-profit institution could make good use of royalties should your spin-off be successful. And do not forget that, usually, one third of the benefits received by the institution will be distributed to the inventors.

Academia is committed to giving the invention the best chance to reach the market. The license partner most committed and able to develop the technology should be chosen. Some TTOs will look for external licensees for a few months, even when a future spin-off is already lined up to in-license. However spin-offs created around the technology are often in the best position to translate it because of the founders' passion and expertise. Therefore, they will generally be granted the license.

What is the benchmark?

Negotiations usually result in a term sheet containing a mix of equity and royalties, sometimes upfront and milestone payments, and non-financial terms (diligence milestones, scope of the license, etc.), which will in turn influence the financial terms (see table 2). Licensing agreements are therefore difficult to compare. Looking at only one aspect such as equity and comparing it with other spin-offs or discussing it with your neighbor who founded an IT company ten years ago may lead you off track.

However, there is often not that much leeway. Some terms are non-negotiable (e.g. academia will not assign or transfer IP rights). Transparency about these terms prevents futile discussions. Then there are internal benchmarks – even if often undisclosed - that TT officers will not diverge from much. However long and painful the negotiations may be, you will likely end up with terms within a pre-defined and relatively narrow range. Agreement terms will influence each other, e.g. more equity will mean fewer royalties and vice versa.

Remember that you can renegotiate. It is common for spin-offs to evolve in terms of strategy or development plans as the company grows, faces challenges, or identifies new market opportunities. The licensing agreement can be renegotiated at

any time by the founders or the investors, as long as the TTO agrees to do so. TTOs are usually open, but the need to renegotiate should be well justified (“Our investors think royalties are too high” is usually not enough). Explain how the situation differs from when the terms were negotiated, e.g. development costs have significantly increased or assumptions in the business plan turned out to be wrong. Remember that it is still a negotiation, so be prepared to offer something in exchange (e.g. more equity for fewer royalties).

Table 2: factors that may influence the negotiation on equity and/or royalties

Leading to higher equity and/or royalties	Leading to lower equity and/or royalties
<ul style="list-style-type: none"> – Large amount of funding (e.g. entrepreneur grant) or support (e.g. incubator) received from academia – Well-advanced project – High potential value of the technology – High estimated current value of the spin-off – Very large market – Extensive field of use – Follow-up patents included 	<ul style="list-style-type: none"> – Limited market – Highly risky project – Project that will need a lot of time and money to succeed – Anti-dilution clause for academia (and duration of it) – Early project – Limited scope of the license – Weak patent: limited scope, limited freedom-to-operate, low chances of being granted, etc. – Need for further in-licensing from third parties to be able to use technology

How should I prepare for negotiations?

Do your homework. As for any negotiation, you have to come prepared. You want to demonstrate to the TTO that they are entrusting the technology to a capable and professional team. Prepare a concise business plan including development (indications, costs, timelines, etc.) and finances. You may even want to present a financial model showing expected costs and revenues for the coming years, explaining why the terms you are proposing are fair. The better prepared you are, the more you can focus on facts and figures rather than emotions. With everything documented, terms will be easier to renegotiate at a later stage, if the need arises.

Chose the right negotiator. This can be essential to obtain a fair deal in a reasonable amount of time (your time should be invested in the technology, not lost in negotiations). Some TTOs will refuse to negotiate with faculty members or current employees of the academic institution directly in order to limit conflicts of interest.

You should therefore consider the support of a start-up lawyer or an entrepreneur with extensive experience in this kind of negotiation. Investors may be less critical of the terms if they know that a well-known professional has been involved. They

Box 2: Licensing agreement main terms

Reimbursement of patenting costs: usually none, as considered to be covered by the equity received. In certain cases or some institutions, may be requested as an extra payment by the spin-off within a certain timeframe (1-2 years). Note that all future patent costs need to be covered by the spin-off.

Upfront and early milestone payments: usually none, as it would not be appropriate for a spin-off to spend its early financial resources on this. These payments are “replaced” with equity.

Late milestone payments: these may be included, as the milestones occur at a later stage of development (e.g. when reaching the market) and the spin-off may have been acquired by a larger company.

Equity: usually in the range of 10%, with a high variability (at least 0-20%). This usually covers the patenting costs and the upfront and early milestone payments that academia could have requested from another licensee such as an industry partner. In some cases, academia will ask for an option to be converted to equity. If it is in a reasonable range, the percentage of equity is unlikely to be a deal breaker: whether 5 or 20%, the founders will still hold 80% or more of the equity.

Royalties: usually around 5% of net sales, again with a high variability (at least 0-10%). High royalties may hurt the spin-off because they will impact the bottom line in the future and make the spin-off less profitable and less attractive for an exit. Here, the industry sector is important: single digit (or even low two-digit) royalties will not hurt the comfortable two-digit benefit in the pharma industry much, but the same royalties can be a deal breaker in other industries with lower margins.

(Due) Diligence milestones. They are what you have to achieve and by when. If these milestones are not reached, the license agreement can be terminated by academia. This can be perceived as a threat by the spin-off and investors, but it is a must for academia in order to ensure that the technology is developed. Therefore, ambitious yet achievable milestones should be included.

Scope of the license. It may not cover everything mentioned in the patent. If the spin-off is performing poorly or has no capacity to actively develop the technology, the academic institution may want to partner with another company for a part of the patent not covered by the licensing agreement (e.g. a new indication that would be better developed by a company specialized in the field).

Non-royalty sublicense income. This represents a part of the benefit that the spin-off will get from further sublicensing the technology to a larger company (beyond the royalties that are due anyway). The part for academia is usually high at the beginning (to avoid immediate sublicensing which is not the goal of a spin-off) and decreases with time.

may ease and accelerate the process, provided they understand academia's expectations and non-negotiables, otherwise they will not be worth the fees you pay them.

Not being the negotiator does not mean you are excluded. Often you will assist in the meetings (e.g. as a silent observer) and prepare (i.e. communicate your preferences and expectations) and debrief with your negotiator. Having someone negotiate for you is also a promising sign that you will be able to delegate in the future. Finally, delegating is a way to ensure that you do not compromise your academic relationships that you may need for ongoing collaborations or future negotiations with the TTO.

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