

What to consider in academic technology transfer

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Standardised analytics

- optimal combinations of reagents, their performance known, incl. effects of confounding substances
- reproducibility of the test and stabilities of the constituents are good, known, and guaranteed by the manufacturer
- generally require less work than their in-house counterparts would

In-house analytics

- optimisation by trial and error
- reproducibility variable, may not be known
- choice of constituents based on ?
- stabilities of the constituents are seldom known (tested)

Patenting the test may be necessary

- product development from an in-house method to an easy-to-use product with high reproducibility may require large effort and big investment
- the final product may help the copiers to reproduce the product more easily and with less money
- a patent protects the developer against copying -> ROI

What is a patent

- an industrial right that guarantees the owner the right to forbid others the commercial use of a technology
 - in a particular country
 - for a limited period of time, max 20 years
- detecting possible infringement is the patent owner's own responsibility
- licensing = the sale of a right to use a patented invention
 - compensation may include upfront fee/down payment, royalties, milestone fees etc.
- the whole patent can also be sold
- note: the contents of a granted patent are always public!

Technology transfer from academia

- running laboratories for large-scale routine analyses is not a task of the universities
- if a test is developed in a university lab, the rights to it can be transferred to industry by
 - licensing the use of patented or not patented technology (tacit knowledge, expert services)
 - sale of a patented technology
- additional activities may be needed
 - sale of the material required for setting up the test
 - training of staff
 - consulting

Specifics of biological materials

- in cases when the invention is not reproducible on the basis of a verbal description only
- a sample of the material must be deposited in an internationally recognized depository before the patent application is filed

Sharing income = royalty

- based on the **license** agreement: the buyer (licensee) gets the right to make, sell or import the technology
- royalty rates vary greatly, depending on
 - type of industry
 - strength of technology
 - market
 - legal aspects of the invention
 - type of license

How to extract value in a license

- up-front fee / down payment (cash, stock, research support, past patenting costs)
- on-going patenting costs
- milestone payments
- annual minimum royalties
- sublicense income sharing
- earned royalties:
 - nominal
 - actual after offsets
 - often calculated from net sales

A further issue concerning academic technology

- who does actually own the technology?
- in most countries, it is the university
- in Sweden and Italy, it is belongs to the academics involved in the research (and be sure to find them all...)
- in Finland, it may belong to the university or to the academics
- in any case, always check with the university and have its view of the IPR situation in writing

Further possible complications

- the research may have been carried out in a project that involves companies or in which the funder's regulations (EU...) affect commercial exploitation of the results
- how to be on the safe side:
 - the sponsored programmes office and the TTO of the university must always be involved in any deal that is planned
 - remember material transfer agreements (also possible MTAs behind the research...)