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ADDIT-CE

Alzheimer's Disease Diagnostics Innovation and Translation to Clinical Practice in Central Europe

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ADDIT-CE TechTransfer Framework Handbook





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ADDIT-CE TechTransfer Framework Handbook

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Introduction

Technology transfer (TT) or knowledge transfer (KT) is the pathway that connects scientific excellence with real-world impact. For many young researchers, the concept may seem distant, complex, or reserved only for a few “applied” projects. Every scientific result has the potential to inspire innovation, improve lives, or create new opportunities when the right steps are taken.

This handbook is designed to make technology transfer accessible and practical. It is structured in three parts: the first explains why technology transfer matters and how it can enrich both society and a researcher’s career; the second clarifies what technology transfer actually is, introducing its basic principles and explaining main keywords; and the third provides a practical guide on how to get started, how to overcome obstacles, and where to get a support.

Our aim is to lower the barriers that often prevent discoveries from leaving the laboratory and to encourage researchers to view technology transfer as a natural part of their scientific journey.

1. Why technology transfer matters?

1.1. Societal and career impact of technology transfer

Technology transfer is the process of transforming scientific research and technological innovations into marketable products or services. It involves the transfer of methods, know-how, inventions and technologies, which should be accessible to a broader range of users who can then further develop and exploit the technology into new products, processes, applications, materials, or services. Technology transfer is beneficial for society, for the institute and for the innovator.

Benefits for society	Benefits for the institute	Benefits for the researcher
<ul style="list-style-type: none">• Economic growth• Improved quality of life• Access to new technologies• Environmental impact• Addresses global challenges	<ul style="list-style-type: none">• Increased funding• Enhanced reputation• New industry partnerships• Talent attraction• Resource optimisation	<ul style="list-style-type: none">• Funding opportunities• Collaborative opportunities• Career advancement• Income from royalties• Feeling of fulfilment

Key takeaway:

Technology transfer is not only about commercialisation. It creates value on multiple levels: for society through improved solutions, for research institutions through sustainability and partnerships, and for researchers through new career opportunities and impact that extends beyond academia.

1.2. Inspiring success stories

Here are some inspiring examples of successful transfers across the European Union.

CasInvent Pharma is a Czech spin-off company from Masaryk University focused on the development of novel small-molecule inhibitors targeting Casein Kinase 1 (CK1), an enzyme involved in cancer cell resistance to therapy. The company aims to bring new treatment options for patients with therapy-resistant leukaemia, lymphoma, and solid tumours.

Takeaway: *Long-term fundamental research can become the basis for a real drug-development company when supported by strong IP protection and investors.*

Biomedical Engineering Biomedical Engineering is a Slovak spin-off company of the Technical University of Košice, specialising in the development of patient-specific cranial and facial implants using advanced 3D printing technologies. The company designs and manufactures customised implants based on CT data, enabling highly precise anatomical reconstruction for neurosurgery, maxillofacial surgery, and orthopaedics.

Takeaway: *Engineering research with clear clinical relevance can transition rapidly from the lab to real-world use through customised product development.*

Fetus IVF is a Czech startup commercialising a patented, non-invasive miRNA-based technology for embryo selection and personalised IVF prediction, licensed from universities in Brno, Bratislava and Košice. The €441,000 lic. agreement with FAB Capital was signed in 2022, enabling the translation of the technology into clinical development. The company has secured financing via FAB and entered a collaboration with a Canadian research organisation to support clinical validation and future FDA approval, with a targeted valuation of up to €40 million.

Takeaway: *Even highly specialised academic research (like miRNA-based diagnostics) can find a clear market application through licensing and clinical validation.*

Allyte is an Austrian spin-off company of the CeMM Research Center for Molecular Medicine specialising in AI-driven precision medicine, particularly in evaluating drug responses in patient-derived tumour tissues. The company developed a platform enabling high-content analysis of individual patient biology, providing insights beyond traditional cell lines or animal models. In 2021, Allyte was acquired by Exscientia (now bought by Recursion), to enhance its translational capabilities and patient-centric drug discovery approaches.

Takeaway: *Smart use of patient data and AI can rapidly attract global industry interest and lead to a successful acquisition.*

Flindr Therapeutics, formerly known as Immagine, is a Dutch biotech company spun out in 2020 from the Netherlands Cancer Institute and Oncode Institute. Flindr focuses on developing first-in-class small-molecule inhibitors for precision oncology. Utilizing its ImmunoGram Drug Discovery Engine, the company has built a pipeline of promising therapies. In 2023, Flindr secured €20 million in Series A financing to advance its preclinical programs.

Takeaway: *Spin-offs built around a clear biological concept and strong translational strategy can successfully attract large early-stage investments.*

Myricx Bio is a London-based biotech company spun out from Imperial College London and the Francis Crick Institute. The company focuses on developing antibody-drug conjugates (ADCs) targeting N-myristoyltransferase (NMT), an enzyme implicated in various cancers. In 2024, Myricx Bio raised £90 million (\$114 million) in Series A financing to advance its novel NMTi-ADC therapeutics into clinical development, marking one of the largest Series A rounds for a European biotech spin-out.

Takeaway: *Exceptional scientific innovation combined with a strong investor syndicate can lead to record-breaking Series A funding even at early stages.*

2. What is technology transfer?

Technology transfer (TT) is the process of turning scientific knowledge (an **intellectual property**) into real-world applications. It describes how research results, ideas, and inventions move from public research organisations, such as universities, into industry, where they can be further developed into products, services, or processes. At its core, technology transfer bridges two very different worlds: academia, which creates and shares knowledge for the benefit of society, and industry, which develops and markets products to generate value. The “bridge” between them ensures that discoveries made in the lab do not remain unused, but instead reach patients, businesses, and communities. Technology transfer takes many forms – including licensing intellectual property, collaborative research, or creating spin-off companies – but the goal is always the same: to ensure that public research benefits society, drives innovation, and stimulates economic growth.

2.1. Intellectual property

Intellectual property (IP) refers to any intellectual creation, such as literary works, artistic works, inventions, designs, symbols, names, images, computer code, and so on. IP always comes with certain rights: some rights must be registered to be effective, while others arise automatically. The most important categories of IP in Life Sciences are:

Know-how

Know-how is valuable technical information (results, experimental techniques, formulae, chemical structures, or simply knowledge “how to...”, which is kept and remains in effect as long as the information remains secret, and it lasts as long as the information is kept secret.

Patents (or utility models)

A patent is a government-issued certificate granting exclusive rights to an inventor, preventing others from using, making, or selling the invention without permission. A utility model is a type of "short-term patent" that protects new, practical inventions, especially those with minor improvements or shorter commercial lives, by granting exclusive rights to the owner for a limited period.

Copyright

Copyright protects items such as original written works, diagrams, charts, computer source code (meaning “software”), photographs, and other similar creations. Copyright arises automatically once your work has been expressed and recorded in permanent form, and will last for different periods of time depending on the type of work protected.

Databases

If the way in which the data is selected and arranged is the result of original intellectual creative activity, the database can be protected as a collective work of authorship (Copyright). Database content: the acquirer has a special right to the database if he/she has made a qualitatively or quantitatively substantial contribution to its acquisition, verification or presentation, regardless of whether the database or its content is protected by copyright. If individual elements of the database constitute works of authorship themselves (e.g. texts, photographs), they are protected by standard copyright, like any other work.

2.2. Different Pathways of Technology Transfer

For researchers, understanding the variety of technology transfer pathways is important because it helps them identify opportunities to apply their discoveries beyond the lab. Each project can take a different route – from collaborating with industry to starting a company or sharing results openly.

Technology transfer does not follow a single route. While spin-off creation and patent licensing are often the most visible outcomes, there are several other important pathways through which research results can reach the market or society. Each pathway has its own advantages, limitations, and suitability depending on the type of technology, the maturity of the results, and the strategic goals of both the research institution and external partners.

Common pathways of the TT include:

- **Patent licensing** – granting rights to use protected inventions, either exclusively or non-exclusively, for example, a company licensing a new diagnostic method developed at the university.
- **Assignment (transfer of rights)** – full transfer of ownership of intellectual property to an external partner, typically when the company is better positioned to commercialise it quickly.
- **Copyright and software commercialisation** – includes licensing or direct exploitation of software, databases, learning materials, and other copyright-protected results. For example, algorithms, analytical tools, or e-learning platforms.
- **Collaborative or contract research** – joint development agreements or research commissioned by an industrial partner with a clear path to commercialisation. This is often the first step toward a deeper partnership.
- **Spin-offs and start-ups** – creating a new company to develop and market the technology. This path is demanding but can bring high impact and visibility.
- **Open innovation and open licensing** – making results accessible under open-source or creative commons models to accelerate adoption and societal impact, e.g., in scientific software or public health tools.
- **Joint ventures and strategic alliances** – establishing long-term cooperation vehicles with companies to co-develop and commercialise new technologies, such as shared research labs or co-funded projects.

Understanding these pathways allows researchers to recognise potential for application early on and to engage effectively with their technology transfer office. Choosing the right path depends not only on the technology itself but also on the desired impact, time horizon, and resources available.

2.3. Technology Readiness Levels

Technology Readiness Levels, or TRLs, are a straightforward scale used to describe the progress of a scientific result from an initial idea to a real-world application. For you, as the originator of the idea, TRLs are useful because they indicate where your research currently stands and what steps are needed to move it closer to application. Understanding TRLs can help you communicate with funding agencies, industry partners, or your TTO, since everyone speaks the same “language” about the maturity of a technology.

TRL	Description	Example
TRL 1	Basic principles observed Scientific research is beginning, with results translated into R&D.	Identification of a potential biomarker related to Alzheimer’s disease (e.g. protein, RNA, imaging signal).
TRL 2	Technology concept formulated Basic principles are studied, and practical applications are considered.	Concept of a diagnostic test based on the biomarker (e.g. blood-based assay or imaging marker).
TRL 3	Experimental proof of concept Active research and development begin with analytical and/or laboratory studies to prove the feasibility of a concept.	Proof-of-concept assay demonstrated in laboratory conditions using research samples.
TRL 4	Technology validated in the laboratory Basic technological components are integrated and validated in a laboratory environment.	Analytical validation of the diagnostic test (sensitivity, specificity, reproducibility) in a controlled lab setting.
TRL 5	Technology validated in a relevant environment The technology is tested in an environment relevant to its intended use.	A prototype diagnostic test was produced as a technical batch and tested on a limited set of real clinical samples, introducing basic quality management requirements.
TRL 6	Technology demonstrated in a relevant environment A prototype or model is demonstrated in a relevant environment.	Validation of the diagnostic test using a larger cohort of retrospective clinical samples; preparation for regulatory requirements (e.g. IVDR).
TRL 7	System prototype demonstration in an operational environment The system prototype is demonstrated in an operational environment.	Clinical performance studies of the diagnostic test in real clinical settings.
TRL 8	System completed and qualified; system incorporated in commercial design The system is fully developed and qualified through testing and demonstration.	Regulatory approval of the diagnostic test (e.g. IVDR compliance) and readiness for routine clinical use.
TRL 9	System proven in operational environment The system is proven through successful operation in its final form.	Diagnostic test implemented in clinical practice and used in real-world healthcare settings.

2.4. Typical challenges in TT and how to overcome them

Timing of publication vs. Protection

You may want to publish results very quickly (e.g., for a thesis, paper, conference abstract, poster, etc.), but public disclosure can harm patentability.

***Solution:** Consult your Technology Transfer Office (TTO) before you submit the manuscript. Remember that filing a patent first allows you to publish without losing protection.*

Uncertainty about intellectual property (IP)

Sometimes you work with colleagues from other institutes, companies or universities. You may not know who owns the rights (student, supervisor, institution) or how to handle joint results.

***Solution:** Ask early about institutional IP rules. Involve the TTO to clarify the IP ownership and conclude agreements.*

Limited resources for development

You may lack funding, lab capacity, or connections to take your idea beyond the proof-of-concept stage.

***Solution:** Use institutional support schemes. Ask for proof-of-concept grants, seed funds and search for incubators like JIC. Explore collaboration with industry!*

Navigating contracts and legal issues

During the TT process, you will often need various contracts, including collaboration agreements, non-disclosure agreements (NDAs), and licensing contracts. It may seem intimidating.

***Solution:** Never sign alone; always involve your TTO or legal experts, as they can help simplify the process.*

High level of uncertainty and risk

Not all ideas will succeed; failures may feel discouraging.

***Solution:** Do not worry, even if your project does not reach the market, the experience builds valuable skills, and next time you will be stronger!*

3. How to do TT in practice?

3.1. Step-by-step guide from the research result to commercialisation

Think of technology transfer as a journey. If you have a result or idea that might have practical use, here's how to move forward:

a. Spot your result

- Ask: Does my research solve a problem outside the lab?
- Discuss potential applications with your supervisor or Technology Transfer Office (TTO).

b. Protect before you publish

- Contact your TTO before submitting a paper, thesis, or poster.
- File a Report of Invention (ROI). The Report of Invention (invention disclosure) should be submitted to the TTO as soon as possible.
- Explore patenting, copyright, or trade secret protection depending on the result.

c. Validate the potential

- Conduct proof-of-concept experiments.
- Apply for seed funding or institutional support.
- Assess strengths, weaknesses, and market relevance.

d. Choose the right pathway

- Decide which **technology transfer pathway** best fits your result. For an overview of the common pathways, see chapter [Different Pathways of Technology Transfer](#)
- **Consult the selected pathway with the TTO.**

e. Make agreements

- Never sign contracts alone.
- Involve TTO/legal experts for NDAs, licenses, or collaboration agreements.
- Clarify IP ownership and revenue sharing early.

f. Move toward the market

- Develop the technology with your chosen pathway.
- Plan for scaling, regulatory approval, and certification.
- Track progress using [Technology Readiness Levels](#)

g. Optional: start a spin-off

- Check market demand and uniqueness.
- Secure funding (grants, venture capital, incubators).
- Build a complementary team (science, business, legal).
- Decide your role: researcher, CEO, or advisor.

Note: Use available support!

- **TTO:** patents, contracts, business development.
- **Incubator:** incubation, mentoring, networking.
- **Funding:** TAČR, Horizon Europe, proof-of-concept grants.
- **Mentors:** experienced entrepreneurs and scientists.

3.2. Where can I get funding for my idea?

Turning a research result into a real product almost always requires additional funding. While basic research is typically supported by public grants, later stages such as prototyping, validation, regulatory testing, and market entry usually require dedicated funding. Universities, national agencies, and innovation centres in the Czech and Slovak environments offer a range of programmes designed specifically to support early-stage technologies and future spin-offs.

Proof-of-Concept (PoC) and commercialisation grants

These grants help bridge the gap between research and the market. They typically support the development, testing, and validation of commercial potential. In the Czech Republic, this type of funding is often provided through university programmes, by the Technology Agency of the Czech Republic (like the [PoC at MU](#)), or regional innovation centres. In Slovakia, similar PoC schemes are primarily offered through national innovation programs, which are financed from the Recovery and Resilience Plan, the Slovak Research and Development Agency (APVV), and internal university commercialisation funds.

University TTO support

Universities may cover early costs related to intellectual property protection (such as patent filing). They may also provide internal funding for market analysis or business validation. Technology Transfer Offices, such as [TTO MU](#), help identify suitable funding calls and assist with applications. In Slovakia, similar support is provided through institutional structures at research organisations, such as the [Bio-medicínske centrum of the Slovak Academy of Sciences](#), in cooperation with the central technology transfer and innovation offices of the Slovak Academy of Sciences. These units support researchers with IP protection, commercialisation strategy, and cooperation with industry.

Incubators and innovation centres

Innovation centres and incubators such as [JIC](#), university incubators, and science parks provide seed funding, mentoring, business coaching, access to networks, and sometimes office or laboratory space. In Slovakia, similar services are offered, for example, by the Slovak Business Agency (through its National Business Centres and incubators), [CIVITTA Slovakia](#) as a startup accelerator and innovation consultancy, and by university-linked innovation hubs such as [UVP TECHNICOM](#) in Košice. These organisations support early-stage startups and academic spin-offs with mentoring, business development, and access to investors.

Public innovation and R&D programmes

National (such as [TA ČR](#) in the Czech Republic and the Slovak Research and Development Agency – APVV in Slovakia) and European programmes (such as [Horizon Europe](#)) support more advanced stages of technology development. These include applied research and innovation grants, often requiring cooperation between academia and industry or spin-offs. In Slovakia, additional innovation-oriented funding is also provided through programmes coordinated by the Research and Innovation Authority ([VAIA](#)), especially within the national Recovery and Resilience Plan. Such funding is typically suitable for technologies at higher TRLs.

Private investors and venture capital

Angel investors, seed funds, and [venture capital funds](#) may invest in promising academic spin-offs. This typically occurs at later stages, once the technology has been validated and a clear business is in place.

Industry co-funding and strategic partners

Companies may co-finance further development through contract research, joint projects, or early licensing agreements. This can significantly reduce the financial risk of early development.

FFF funding

FFF means “Friends, Family and Fools”. In very early stages, some founders consider raising money from their personal network, including family members, friends, or close acquaintances. This type of financing can be fast and flexible, but it comes with **significant risks**. Mixing personal relationships with business can lead to misunderstandings, pressure, and long-term conflicts if the project fails. Use this funding with caution! The public funding, incubators, or professional investors are a much safer starting point.

3.3. Should I start a company?

Not every technology finds an immediate buyer or licensing partner. Sometimes, the industry may see the idea as too early, too risky, or outside its current focus. If you strongly believe in the potential of your discovery and are determined to see it reach the market, starting your own company can be the way forward. Creating a spin-off allows you, as the inventor, to take the lead in developing and commercialising your product. It is a more demanding path, but it can also be highly rewarding – giving you both ownership and the chance to transform your research into real-world impact.

Questions to ask yourself before starting a company

Before you contact your TTO with an idea to start a spin-off, ask yourself:

Market demand and pricing

- Is there a real problem that my technology solves?
- Is there clear demand or need for this solution in the market?
- What is the expected price level of comparable products (e.g. a new drug or diagnostic tool)?
- Who would pay for it – hospitals, insurance companies, patients, or industry partners?

Technology readiness

- Is my technology in the right TRL?
- Is it mature enough to attract partners, customers, or investors?

Competition and uniqueness

- Who else is working on similar technologies?
- What makes my solution unique or better?

Funding and resources

- Do I have enough capital to sustain the company in the first 2–3 years?
- If not, do I have access to investors, grants, or incubator programs?

Team, commitment and personal motivation

- Do I have the right team with complementary skills (science, business, legal, etc.)?
- Am I personally willing to take the role of CEO, or should I find someone else to lead?
- Do I want to dedicate significant time and energy to building a company, alongside or instead of my academic career?
- Am I ready for the risks and uncertainties that come with entrepreneurship?

Checklist - when is the right time to start a spin-off?

- There is a strong technology with a clear value proposition.
- There are clear IP rights to the technology.
- There are known initial customers, and you have a plan for how to reach them.
- The commercialisation potential is greater than licensing.
- The expected benefits outweigh the risks.
- You are enthusiastic and committed to the venture.

3.4. Open Science vs. Technology Transfer

Open Science, Open Access, and data sharing are now core principles of modern research. At the same time, many research results have strong application and commercial potential. **These two approaches are not in conflict**, but they must be carefully balanced and correctly timed.

A widely used principle in Open Science says: “*As open as possible, as closed as necessary.*” This perfectly describes the relationship between openness and technology transfer.

Remember: any public presentation, poster, thesis stored in an online repository, preprint, or conference talk may legally count as *public disclosure*. Once your idea is publicly disclosed, it can no longer be patented in most countries. Therefore, the key rule in technology transfer is: ***Protect first, publish later***. If your result might be commercially relevant, always contact your Technology Transfer Office before publishing or sharing it openly. A patent application can usually be filed quickly, and once it is filed, you are free to publish without losing protection.

“As open as possible...”

After protection is secured, research results can be shared through publications, Open Access journals, and data repositories — supporting transparency, reproducibility, and scientific progress.

“...as closed as necessary.”

Sensitive technical details, enabling know-how, trade secret, prototypes, or datasets that allow reproduction of the invention must remain confidential. When discussing your idea with companies or external partners, always use a **Non-Disclosure Agreement (NDA)** in the early stages.

Key message: You do not have to choose between Open Science and technology transfer. You can follow both (*as open as possible, as closed as necessary*) if protection comes first and openness follows at the right time.

4. Who can help you?

You do not have to navigate technology transfer on your own.

Universities and partner institutions provide dedicated support through Technology Transfer Offices and innovation professionals who can guide you from early ideas to real-world applications. The contacts listed below provide guidance on where to turn for advice, support, and next steps.

Institution	How they support you in TT	Contacts
JIC (South Moravian Innovation Centre)	<ul style="list-style-type: none"> • Incubation and acceleration programmes for start-ups and spin-offs. • Mentoring in business development, pitching, and investor readiness. • Networking with industry and investors. • Support for student entrepreneurship and early-stage ideas. 	<ul style="list-style-type: none"> • Veronika Štěpánková Start-up Support Tel: +420 736 773 135 Email: stepankova@jic.cz • Jiří Zhoř Student Entrepreneurship Support Life Science Transfer Academy Tel: +420 607 047 219 Email: zhor@jic.cz
CEITEC MU (Central European Institute of Technology – Masaryk University)	<ul style="list-style-type: none"> • Dedicated TT management for CEITEC researchers. • Early consultation on invention disclosures and patentability. • Support in identifying commercialisation pathways and potential partners. • Mentoring for researchers considering spin-off creation. 	<ul style="list-style-type: none"> • Daniela Tršová Business Development Manager/ Technology Transfer Manager Tel: +420 777 472 878 Email: daniela.trsova@ceitec.muni.cz
TTO MU (Technology Transfer Office of Masaryk University)	<ul style="list-style-type: none"> • Guidance on intellectual property protection (patents, copyrights, know-how). • Drafting and negotiating contracts (NDAs, license agreements, collaboration agreements). • Business development support and identification of industrial partners. • Legal expertise in IP ownership and technology transfer processes. 	<ul style="list-style-type: none"> • The TTO MU Team: https://www.ctt.muni.cz/en/about/team • Jana Diblík Daňková Business Development Manager Tel: +420 549 498 242 Email: dankova@ctt.muni.cz • Markéta Vlasáková Intellectual Property Manager Tel.: +420 549 493 512 Email: vlasakova@ctt.muni.cz
TTO SAS (Technology Transfer Office of the Slovak Academy of Sciences)	<ul style="list-style-type: none"> • Central technology transfer office for all institutes of the Slovak Academy of Sciences. • Support with invention disclosures, patent strategy, and IP protection. • Licensing of technologies and negotiation of commercial agreements. • Support with spin-off creation and cooperation with industry. 	<ul style="list-style-type: none"> • The TTO SAS Team: https://ktt.sav.sk/en/about-us/

APPENDICES

ANNEX 1: Glossary of terms and abbreviations

Below you can find a brief glossary of the most common terms and abbreviations used in technology transfer. Some of them are not mentioned in this document, but this list can help you navigate the basic concepts and documents you may encounter in collaboration with the Technology Transfer Offices.

Assignment	A full transfer of ownership of intellectual property from one party to another.
Collaborative research	Joint research conducted with external partners, often combining expertise and resources.
Commercialisation	The process of bringing research results to the market through licensing, collaboration, or company creation.
Contract research	Research commissioned and funded by an external partner with specific deliverables and objectives.
Copyright	Legal protection of creative works such as software, databases, publications, or educational materials.
Equity	Ownership interest (shares) in a company, often held by the university or inventors in a spin-off.
IP – Intellectual Property	Results of creative or inventive activity that can be legally protected (e.g. patents, trademarks, designs, copyrights).
IPR – Intellectual Property Rights	Legal rights granted to the creators or owners of intellectual property.
Know-how	Practical knowledge, expertise, or technical skills that may or may not be protected by IP rights.
KT – Knowledge Transfer	The process of sharing knowledge, skills, and technologies between universities, industry, and society.
License Agreement	A contract granting another party permission to use intellectual property under defined conditions.
LoI – Letter of Intent	A document expressing preliminary commitment before signing a formal contract.
Lump sum	A one-time, fixed payment made by a licensee to the IP owner, usually upon signing a license agreement or reaching a specific milestone.
MoU – Memorandum of Understanding	A non-binding document outlining the intention to collaborate.
NDA – Non-Disclosure Agreement	A confidentiality agreement protecting sensitive information shared between partners.
Open Science	An approach to scientific research that strives for maximum transparency, accessibility and reusability of scientific results
Open-source license	A license allowing free use, modification, and distribution of software or data under defined conditions.

Patent	A legal protection granted for an invention that is new, inventive, and industrially applicable.
Prototype	A preliminary version of a product used to test functionality and demonstrate the technology.
Royalty	A payment made by a licensee to the IP owner based on sales or use of the licensed technology.
Spin-off	A new company established to commercialise technology developed within a research institution. Usually, the university or researchers hold a stake.
Start-up	A newly created company developing an innovative idea, not necessarily originating from a university.
Term Sheet	A non-binding document summarising the key commercial and legal terms proposed for a future agreement, such as a license or investment deal. It serves as a basis for drafting the final contract.
Trade Secret	Confidential know-how or information that gives a competitive advantage if kept secret.
TRL – Technology Readiness Level	A 1–9 scale used to measure the maturity of a technology, from basic research (TRL 1) to a market-ready product (TRL 9).
TT – Technology Transfer	The process of transforming research results into products, services, or applications with societal or economic impact.
TTO – Technology Transfer Office	A university or research institute unit that supports researchers in protecting and commercialising their results.

ANNEX 2: Ethical and social aspects of TT

Societal responsibility

- **Patient safety and public health** – results must be verified and safe for the end-user.
- **Accessibility** – technology should not be available only to privileged groups; the issue of pricing policy and availability of medicines.
- **Environmental impact** – new technologies can have environmental impacts, which must be considered.

Ethical principles

- **Integrity of research** – TT must be based on honest, reproducible results, without data manipulation.
- **Conflict of interest** – scientists should be transparent about whether they have a financial stake in a spin-off or collaborate with a company.
- **Publication vs. protection** – the ethical dilemma between the open sharing of scientific knowledge and the need to protect IP.
- **Equity in collaboration** – fair distribution of rights and benefits between the university, researchers and industrial partners.

Societal engagement

- **Communication with the public** – understand why TT is taking place, what its goals are and what benefits it will bring.
- **Stakeholder involvement** – involving patients, citizens or communities in decision-making (e.g. in health technologies).
- **Global perspective** – TT often crosses borders, cultural differences and international regulations must be respected.

Regulatory and legal context

- **Compliance with laws** – personal data protection (GDPR), clinical regulation, bioethics committees.
- **Responsible licensing** – licenses should not lead to monopolies that hinder further research or the availability of medicines.
- **Open science vs. commercialisation** – finding a balance between open sharing and sustainable development financing.

ANNEX 3: List of useful resources

General info about the technology transfer

Technology Transfer at Masaryk University (CTT MU brochure)

https://www.ctt.muni.cz/media/3063733/brozura20_en.pdf

Practical introduction to technology transfer at MU with real examples.

Association of University Technology Managers (AUTM) – Resources for Researchers

<https://autm.net/resources-surveys/researchers>

One of the most important global sources of practical TT guidance, case studies, and best practices.

World Intellectual Property Organisation (WIPO) – Technology Transfer Resources

<https://www.wipo.int/technology-transfer/en/>

Global overview of TT frameworks, licensing, and IP management in academia.

Technology Readiness Levels (TRLs)

https://tacr.gov.cz/dokums_raw/cofundy/TRL_Technology_Readiness_Level.pdf

Official TRL description used in European and national funding programmes.

Intellectual property & patenting

Industrial Property Office of the Czech Republic (ÚPV ČR)

<https://upv.gov.cz/>

Official Czech patent authority providing information on national patents, utility models, trademarks, and industrial designs, including guidance on application procedures.

Industrial Property Office of the Slovak Republic (ÚPV SR)

<https://www.indprop.gov.sk/>

Official Slovak patent authority offering information on intellectual property protection in Slovakia, including patents, utility models, trademarks, and designs.

European Patent Office (EPO) – Patent Guidelines & How to Apply

<https://www.epo.org/en/applying>

Official guide to the European patent system, application process, and patent protection principles.

EPO – Espacenet (Patent Search Database)

<https://worldwide.espacenet.com/>

Free global database for searching existing patents and prior art.

WIPO – What Is a Patent?

<https://www.wipo.int/patents/en/>

Clear explanation of what patents are and how they work internationally.

Funding & Commercialisation in Europe

Horizon Europe – From Research to Innovation

https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en

Main European funding programme for applied research and innovation.

European Innovation Council (EIC)

<https://eic.ec.europa.eu>

Funding specifically for market-driven innovation, spin-offs and start-ups.

Technology Agency of the Czech Republic (TA ČR)

<https://www.tacr.cz>

National Czech funding agency for applied research and innovation.

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