



# **Managing Collaboration between Research Institutions and Industry – IP Related Collaboration Contracts**

**National Workshop “Innovation Promotion and Technology Transfer”**

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# Topics

- **Industry – University Research Collaboration**
- **Technology Transfer**
- **License Agreement**
- **Development Collaboration Agreement**
- **Research Services Agreement**
- **Material Transfer Agreement**
- **Sponsored Research Agreement**
- **Consultancy Agreement**
- **Confidentiality Agreement**
- **IP Ownership and Right to Exploit the IP Generated**
- **Facilitating Agreement on Collaborations**
- **Win-Win Collaboration**

# Industry – University Research Collaboration (1)

- Knowledge-Based Global Economy – New Challenge for Businesses
  - New Type of Products – Based on Complex and Fast Changing Technologies
  - Global Competitiveness
  - New Collaboration Partners
  - Global Mobility – Funds/People
  - New Business Models – “Open Innovation”
  - R&D and Universities – New Potential Solution for Needs

# Industry – University Research Collaboration (2)

- Knowledge-Based Global Economy – New Role of Universities and R&D Institutions
- Traditional Role – Education/Publishing
- **Bayh-Dole Act**, 1980, United States:
  - uniform IP policy among federal agencies funding research;
  - universities **retain ownership** to inventions made under federally funded research;
  - universities are expected to disclose, to protect and to ensure commercialization upon licensing;
  - benefit sharing – inventor, department, university and TT process.
- New Government and Businesses Approach to the University Role in Economic Development
- **EU – Commission Recommendation – April 10, 2008** – Knowledge transfer between universities and industry is made a **permanent political and operational priority for all public research funding bodies within a Member State**, at both national and regional level.
- University Interest and Benefits for Collaboration with Industries
- Government Proactive Policies – to create favorable conditions for collaboration and **technology transfer** between universities and industry.
- **Strategy of Scientific and Technological Development of the Republic of Serbia “Focus and Partner”**.

# Technology Transfer

- *The technology transfer is the process of applying research results in practical use.*
- *The Massachusetts's Institute of Technology : “ Technology transfer is the movement of knowledge and discoveries to the general public”.*
- *AUTM (The Association of University Technology Managers) – very broad definition of technology transfer as the movement of ideas, tools, and people among institutions of higher learning, the commercial sector and the public.*
- *Transfer of technology refers broadly to a series of processes enabling and facilitating flows of skills, knowledge, ideas, know-how and technology among different stakeholders such as university and research institutions, international organizations, IGOs, NGOs, private sector entities and individuals. Transfer of technology, which is often considered to include the absorption of new technologies, is sometimes also considered to involve the transfer of concrete knowledge for the manufacture of products, the application of a process or for the rendering of a service granting the improvement of domestic as well as the international competitiveness in the economic market.*
- *Ensure that scientific and technological developments are accessible to a wider range of users who can then further develop and exploit the technology into new products, processes, applications, materials or services.*

# Technology Transfer

- Technology Transfer – almost always contains transfer of “know-how”, thus closely related to Knowledge Transfer.
- What can be transferred?
  - **Intellectual property (IP)** refers to creations of the mind: inventions, literary and artistic works, symbols, names, images, and designs used in commerce.
  - IP is divided into two categories:
    - **Industrial property:**
      - inventions (patents)
      - trademarks
      - industrial designs, and
      - geographic indications of source;
    - **Copyright:** mostly related to software, but also drawings, manuals, scientific works.
  - **Tangible research property:** unpatented biological research materials
  - **Intangible property:** trade secrets, know-how.

# Technology Transfer

- How knowledge / technology transfer can be done?
- **Informally**
  - Discussions
  - Seminars
  - Articles
  - Working relations
- **Formally – Contracts**
  - License Agreements
  - Development Collaboration Agreements
  - Research Services Agreements
  - Sponsored Research Agreements
  - Material Transfer Agreement
  - Consultancy Agreements
  - Confidentiality Agreements

# License Agreements (1)

- Definition: A license is a consent by the owner of IP (Licensor) to the use of IP by other party (Licensee) in exchange for money or other value (cross-license).
- Permits another party to:
  - make, have made, use, sell, import (patents);
  - copy, display, distribute, modify, make derivative works (copyright).
- Patent license – waiver of right to exclude.
- Copyright license – waiver of right to control.
- “Technology license” – may include different types of IP.



# License Agreements (2) – When R&D Institution is Granting IP License?

- **Commercialization of the research results** – bringing invention to the market
  - Licensing to the industry partner;
  - Creation of the **spin-off company** based on the licensed technology developed in the university.
- In the context of the **collaboration with R&D or industry partner for:**
  - Use of “Background IP”;
  - Use or access to the research results and IP developed by one party during the collaboration – “Foreground IP”;
  - Commercialization of the jointly developed technology through Grant a license to the third party – company.
- In the framework of the **Sponsored Research Agreement** – IP license of the research results may be granted by the university to a founder of the research.
- **Material Transfer Agreement** – license to another R&D institution or company to use patented research material for scientific or commercial purposes.

# License Agreements (3) – Why is it Important for R&D Institutions?

- Most frequently used mean of technology transfer from universities to industry, in particular in US where universities are obliged to retain ownership on the IP developed through publically funded research.
- Permits:
  - IP ownership to be retained;
  - Development of strategic IP portfolio;
  - Multiple options and partnerships for IP commercialization;
  - Flexible negotiation context for reaching “Win-Win” deals;
  - Development of building blocks for “Open Innovation” collaboration;
  - Return on research funding and investment.

## License Agreements (4) – Why is it Important for R&D Institutions?

- Important for R&D institution, as a licensor, to always have the right to use licensed technology for further research and non-profit purposes.
- Research exemptions are implicit in the European law.
- In the US, in the case of an exclusive license, research exemption has to be explicitly mentioned in a licensing contract.
- **“Retained Rights.** University retains the right, on behalf of itself and all other non-profit academic research institutions, **to practice the Licensed Patent and use the Technology Information and Licensed Technology for any non-profit purpose, including sponsored research and collaborations.** Licensee agrees that, notwithstanding any other provision of this Agreement, it has no right to enforce the Licensed Patent or to claim based on the Technology Information or Licensed Technology against any such institution” – University Model Agreement.

# Development Collaboration Agreements or Joint Research Agreements (1)

Two or more parties, each having special skills and assets, cooperate to develop and possibly commercialize a new technology.



# Development Collaboration Agreements (2)

- Both parties are investing equally, or in an adequate proportion:
  - Resources;
  - Skills;
  - Assets and
  
- Jointly define
  - Objectives;
  - Timelines;
  - IPR Ownership;
  - Access rights;
  - Benefit sharing.
  
- Parties share development risk and benefits.
- Both parties can commercialize developed results.
- Resources – human, physical and financial.

# Development Collaboration Agreements (3)

- **Assets** include “**Background Intellectual Property Rights (IPR)**” – any IPR controlled or owned by any Party prior to the date of commencement of the collaboration or IPR generated by any of the Parties independently of the Project and controlled or owned by that Party or any IPR to which the Party has the necessary rights for the purpose of the Project .
- “**Foreground IPR**” – IPR generated in the framework of the project.
- **Access Rights** – rights granted by the parties to each other, as opposed to licensed to third parties.
- Example: Model Agreements, California University
  - “In consideration of the collaborative nature of this research, Collaborator shall grant to California an irrevocable, **non-exclusive, royalty-free, non-commercial license** to use such invention or discovery for **internal purposes only**.
  - In consideration of the collaborative nature of this research, California shall grant to Collaborator an irrevocable, non-exclusive, royalty-free, non-commercial license to use such invention or discovery **for internal purposes only**”.
- **Benefit sharing** – revenue sharing in accordance with the principles and conditions set up in the framework.

# Development Collaboration Agreements (4)

## ■ IPR ownership

- The ownership of the “Background IPR” is usually retained by the Party which was the owner, or had control over the use of the particular IPR before the collaboration project started.
- “Foreground IPR” is generally shared and considered as “joint ownership”.
- Access Rights – Parties are usually giving rights to each other to use the IPR developed and owned by them – but only in the framework of the implementation of the project, use of the jointly developed technology or for the internal use only.

## ■ Joint Ownership – Attention !!!

- Joint owners of Resulting **IPR shall agree between them on who shall be responsible for the timely prosecution and maintenance** of all such Resulting IPR and the Party that is nominated to be so responsible shall be entitled to charge the other joint owners with a percentage of the costs of so doing as agreed between the joint owners. In the absence of any agreement to the contrary between joint owners the costs shall be equally shared.
- Different jurisdictions have different rules regarding management of the jointly owned IPRs:
  - European law – consent of the other party is a necessary precondition for use and commercial exploitation of the jointly owned IPR;
  - US – there is no requirement of the previous consent of the co-owner.

- Example: “Model Agreement, University of California” ...made **jointly by Collaborator and California faculty**, postdoctoral fellows, students, and other employees **will belong jointly to Collaborator and California**, with the understanding that either of the joint owners shall be free to make, sell, use, or license others to do the same, **such joint invention or patent thereon without accounting to the other party”**.

# Development Collaboration Agreements (5)

- **EU COMMISSION RECOMMENDATION** – on the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations (April 10, 2008).
  - **Principles Regarding Collaborative and Contract Research:**
    - Compatible with the **mission** of each party.
    - IP-related issues should be **clarified at management level and as early as possible** in the research project, ideally **before it starts**.
    - **Ownership of the “foreground IPR”** – the foreground should stay with the party that has generated it, but can be allocated to the different parties on the basis of a contractual agreement concluded in advance, adequately reflecting the parties’ respective interests, tasks and financial or other contributions to the project.
    - Ownership of the **“background IPR”** – should not be affected by the project.
    - **Access rights** should be clarified by the parties as early as possible in the research project, ideally before it starts. Where necessary for the purpose of conducting the research project, or for the exploitation of foreground of a party, access rights to other parties' foreground and background should be available, under conditions which should adequately reflect the parties' respective interests, tasks, and financial and other contributions to the project.



# Development Collaboration Agreement (6)

- Usually parties are commercial, but recently more often public research institutions are becoming parties in the IP business collaborations with commercial goals.
- Joint technology development of university's research results and IP prior to collaboration or IP license.
- Business interest of the company – it can leverage on the university's resources, and in particular scientific know-how, to explore the feasibility of commercial applications.
- New business models – such as “Open” or “Collaborative” Innovation create new IP cooperation opportunities on local and global level.

# Development Collaboration Agreement (7)

- There is **inter-relation between collaboration and licensing agreements** – most of the collaborations are based on the cross-licensing of the background and foreground IPR of the parties, necessary for the implementation of the project and on the licensing out of the developed technology to the third party.
- Often there is an overlapping between **research service and collaboration agreement** – as in some cases contractors are also collaborative partners.
- If collaboration is in the same time **research service agreement or contract research agreement**, the management of the IPR ownership will be different.
- **EU COMMISSION RECOMMENDATION** – in the case of **contract research** the foreground generated by the public research organization **is owned by the private-sector party**. The ownership of background should not be affected by the project.
- IPR management – **essential** for the success of the collaboration.

# Research Services Agreements (1)



- Contract research – “**work for hire**”;
- Services agreement;
- One party establishes goal and pays, the other party conducts research toward goal;
- Commercial goals – not academic;
- Background IP and results may be owned by paying party:
  - Inventions and patents assigned to paying party;
  - Copyright work made for hire, limited publishing rights for institution;
  - Institution will charge full economic cost.

# Research Services Agreements (2)

If performed by public R&D institution, it should be managed in line with the interest and IP policy of the institution, preferably in the case of:

- Specifically-designed projects and services, not as a regular practice;
- When there is a particular interest – access to market developed new technologies, acquisition of new knowledge and experiences.
- The best way to avoid undesirable results – well developed institutional policy regarding delivery of such services:
  - Desirable outcome;
  - Acceptable;
  - Caution! – If sponsor retains IP ownership, university **must** retain right to use the IP for non-profit purposes.

# Research Services Agreements – Example (3)

The Sponsor will own the Intellectual Property in the Results and may take such steps as it may decide from time to time, and at its own expense, to register and maintain any protection for that Intellectual Property, including filing and prosecuting patent applications for any of the Results.

Where any third party such as a student or contractor is involved in the Project, the University or the party engaging that contractor (as the case may be) will ensure that the student and the contractor assign any IP they may have in the Results in order to be able to give effect to the provisions of this clause 4.

<http://www.innovation.gov.uk/lambertagreements/>

# Research Services Agreement – Example (4)

- Each Party grants the other a royalty-free, non-exclusive Licence to use its background for the purpose of carrying out the project, but for no other purpose. Neither party may grant any sub-licence to use the other's Background except that the Sponsor may allow its Group Companies, and any person working for or on behalf of the Sponsor or any Group Company, to use the University's Background for the purpose of carrying out the Project.
- **The Sponsor grants the University a royalty-free, non-exclusive licence to use the Results for the purpose of carrying out the Project, but for no other purpose. The University may not grant any sub-licence to use the Results.**

# Material Transfer Agreement (1)

- Material Transfer Agreement (MTA) is a contract that governs the transfer of tangible research materials between two parties, provider and recipient, when the recipient intends to use it for its own research purposes.
- Patented materials – transfer through a license agreement.
- MTA – unpatented biological materials (reagents, cell lines, plasmids, vectors etc.), chemical compounds, some types of software.
- Defines the rights and obligations of the parties regarding:
  - Transferred materials;
  - Derivatives;
  - Research results – ownership, access and use.
- Most common for R&D institution are 3 types of MTA:
  - From R&D institution to industry;
  - From industry to R&D institution;
  - Between two R&D institutions – normally with non-profit objectives.

# Material Transfer Agreement (2)

- Challenges for R&D institutions – mostly in relation to collaboration with industry:
  - Industry, as provider, usually request to have ownership on the research results obtained through the use of the transferred material or exclusive rights;
  - All derivative versions;
  - Limit the right of the R&D institution to publish research results.
- Potential solution – well defined IP policy and negotiation guidelines for R&D institutions , with different sound options – for example if exclusive rights are granted to limit them in time and field of use.
- MTA for non-profit collaboration – good way of knowledge dissemination between academia and R&D, relatively simple to apply.



# Sponsored Research Agreement (1)

- A written document which describes the relationship between Recipients and commercial entities in which Recipients receive funding or other consideration to support their research in return for preferential access and/or rights to intellectual property deriving from Recipient research results.

→ Definition of the US National Institutes of Health (NIH)



# Sponsored Research Agreements (2)

- Driven by academic interests and funded by industry.
- Sponsor does not necessarily contribute to the research activity.
- Does not lead to an industrial end – goal.
- Can provide a strategic input to the sponsor.
- University usually owns the results and IP developed.
- IP license to the sponsor (exclusive or non-exclusive).
- Government sometimes **provide guidance** for such cooperation.

# Sponsored Research Agreements (3) Example A

**All rights in inventions, discoveries, biological material or software created in the course of the Research shall be the property of HARVARD.** HARVARD shall promptly report any such inventions, discoveries, biological material or software to SPONSOR upon receipt of a written report from the Principal Investigator.

## a) Patents

HARVARD agrees to cause patent applications to be filed and prosecuted **in its name** at SPONSOR's request and expense on inventions or discoveries conceived and reduced to practice in the course of the Research. **HARVARD shall promptly notify SPONSOR and provide it a copy of any such patent application. From the date of notification, SPONSOR shall have a < > period to negotiate the terms of a license agreement and HARVARD agrees to negotiate these license terms in good faith.** During this period HARVARD will not offer a commercial license to any other party.

In the event SPONSOR does not agree, within < > days after notification of HARVARD's intent to file a patent application, to support said filing, HARVARD may file at its own expense and SPONSOR shall have no further rights in that patent application.

# Sponsored Research Agreements (3) Example B

**The University grants to the Sponsor a non-exclusive**, indefinite, fully paid-up, royalty-free licence (with the right to sub-license to any Group Company and to any person working for, or on behalf of, the Sponsor or any Group Company, but only for the purpose of carrying out that work, and otherwise without the right to sub-license) to use the Intellectual Property in any of the Results for any purpose within the Field in the Territory.

<http://www.innovation.gov.uk/lambertagreements>

# Consultancy Agreements (1)

## Definition:

- Professor or researcher provides expert service to private company in exchange for payment, usually on a personal basis where University policies permit.



# Consultancy Agreements (2)

Context in which they are used:

- Where University policy permits professors/ researchers to engage in private activity during a limited number of hours of work.
- Where persons act as consultants as their main line of work.
- In technical assistance, franchising and technology licensing contracts, where expertise and additional know how for the implementation of the initial contract is needed.

# Consultancy Agreements (3)

## Terms:

- Payment set forth by hour/day/month/term of agreement.
- Subject matter of the consulting is open-ended and described.
- Background IP is defined and is retained by the Consultant.
- **Ownership of new IP may be shared or owned by company and is set forth in the agreement clearly.**

## Consultancy Agreements (4)

### EXAMPLE

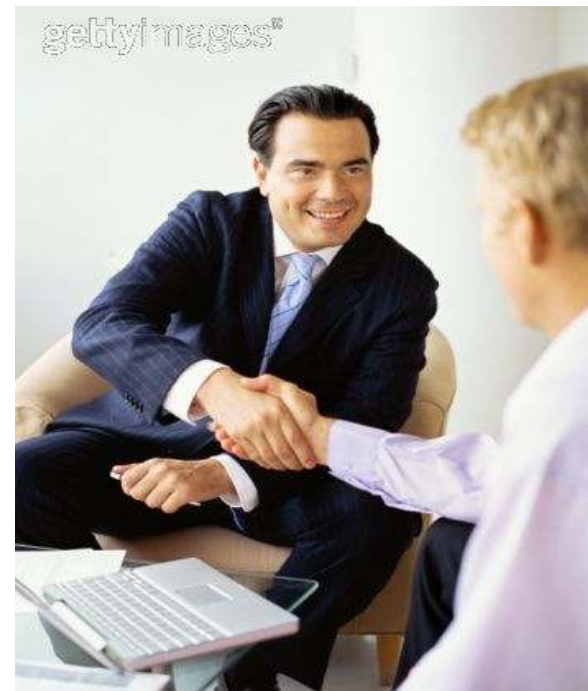
“Any idea, invention, concept, discovery, work of authorship (including without limitation, software, computer programs, and databases (including object code, micro code, source code and data structures), and all enhancements, modifications and updates thereof and all other written work products or materials), patent, copyright, trademark, trade secret, know-how or other intellectual property that the Consultant conceives, makes, creates, invents or suggests during the term of the Agreement that are connected with the Consultant’s performance of services for The Company or are otherwise related to the business of The Company (collectively, “IP”) shall be the sole property of The Company. **The Consultant agrees to assign, and hereby does assign, all right, title and interest in and to IP to The Company.**”



# Confidentiality Agreement (1)

## Definition:

A legally binding agreement not to disclose confidential information that a party has learned, or use it for any purposes other than those specified in the agreement. May also be called a non-disclosure agreement.



# Confidentiality Agreements (2)

In what context are they used?

- Before an IP license or other agreement is established, licensee wishes to have further detailed information about the IP or technology.
- In the context of the collaboration agreement – both parties may take an obligation not to disclose or use the information regarding background IPR of the other Party.
- Where a company is acquiring another company and wishes to know about its IP or technology.
- In the context of the employment relations.

# Confidentiality Agreements (3)

## Terms:

- Receiving party agrees to maintain information in confidence.
- Receiving party agrees not to use the information for any purpose other than that specified (e.g. only for evaluation of the technology during the negotiation).
- May be mutual or unilateral.
- Parties have to specifically agree what would be considered as a confidential information, how the information will be transferred (as a written document, video tape) and what would be the “confidentiality” period.
- Example: “For the purpose of this clause “Confidential Information” shall mean all information of a commercially sensitive nature including (but not limited to) specifications, drawings, circuit diagrams, tapes, discs and other computer readable media, documents, techniques and know-how which are disclosed by one Party to the other for use in or in connection with the Project”.

# Confidentiality Agreements (4)

- The terms should be set up in a way to protect information and the interest of the Parties, to provide an efficient communication based on the confidence.
- Example: “It is contemplated that the work of this agreement can be carried out without disclosing any of Collaborator’s confidential information to the University. However, should it become necessary to disclose Collaborator’s confidential information, Collaborator will notify the University in advance and in writing. Collaborator’s confidential information will be clearly marked as such in writing. If information is orally disclosed which is deemed or desired to be confidential, such confidential information must be reduced to writing by Collaborator within thirty (30) days of oral disclosure and provided to the University.”
- However, terms should be realistic and acceptable for both Parties.
- Example “The Receiving Party shall not, during a period of fifteen (15) years after the termination of this Agreement, use any such Confidential Information for any purpose other than the carrying out of its obligations under this Agreement or other than in accordance with the terms of this Agreement.”
- Unreasonable requests are diminishing confidence and unnecessarily jeopardize implementation of the core agreement.

# IP Ownership and Right to Exploit the IP Generated (1)



- Universities need the right to use the IP for future research
  - Retain a right to non-commercial research.
  - Publication right subjected to reasonable conditions.
  - No or limited obligation on future IP generated after the project.

# IP Ownership and Right to Exploit the IP Generated (2)



- Companies need the right to use the IP for commercialization
  - Retain an exclusive right for commercial use.
  - Ability to transfer to subsidiaries.
  - Right to non-exclusive use of any university's background IP introduced to the project.

# Facilitating Agreement on Collaborations

- Disagreement over IP ownership is a major barrier to research collaborations all over the world.
- The real issue is not IP ownership but the exploitation rights for any IP generated in the university and the commercial benefits derived from it.
- Model contracts which cover the main approaches to IP ownership, management and exploitation are very important in speeding-up negotiations.

# Win-Win Collaboration

- Both partners can achieve their objectives in the collaboration without too much liabilities and risks.
- Both partners are able to benefit from the commercialization of the results in a fair manner.
- IP terms should not be overtly restrictive, and be creative enough to allow for the full economic potential to be unlocked by each of the partners.





**THANK YOU!**

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