**Hypothetical Case Studies**

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Introductory

This document, which is part of the Volume II of the IP Toolkit for Academic and Research Institutions, includes five hypothetical case studies. The purpose of these case studies is to introduce the participants with key issues in Academia-Industry transactions by diving into realistic, interesting stories that reveal various research fields, colorful characters and different interests of the parties involved in IP collaboration and commercialization of the research results.

Four of the five case studies refer to IP agreements that are used frequently by Universities and Public Research Institutions in their business transactions with industry: 1. Contract Research Agreement; 2. Exclusive License Agreement; 3. Collaborative Research Agreement; and 4. Material Transfer Agreement – models of which the user can find in the other part of the Toolkit entitled “Models of Agreements”.

The 5th hypothetical case study describes the complexity regarding various intellectual property ownership issues due to tension between the openness and collaborative nature of academia and the legal and formal requirements of IPR.

Each case study begins with a background story followed by several focused issues arising from it, dealing with key questions that are common in the specific case.

We believe that it is important for anyone who wishes to practice technology transfer transactions to be familiar with these issues, the difficulties, and the rationale behind proposed solutions that need to consider the concerns and interests of all sides.

This material is also conceptualized to be used for educational and capacity building purposes in academic institutions, as well as for different trainings organized by innovation stakeholders – such as national IP Offices.

**Authorship and Acknowledgements**

The Hypothetical Case Studies were prepared under the direction and management of Ms. Olga Spasić (Project Leader) and authored by Ms. Hagit Messer-Yaron and Dr. Keren Primor.

The Hypothetical Case Studies are part of the World Intellectual Property Organization’s (WIPO) **Intellectual Property (IP) Toolkit for Academic and Research Institutions – Connecting Academic Research with the Economy and Society.**

This publication is part of the **WIPO IP Toolkit for Academic and Research Institutions[[1]](#footnote-1),** which alsoincludes:

* IP Policy Template for Academic and Research Institutions: A compendium of key issues that are essential in an IP policy. Authors: Ms. Lien Verbauwhede Koglin, Mr. Richard Cahoon, Mr. Mohammed Aljafari, Ms. Hagit Messer-Yaron, Mr. Barthelemy Nyasse, Ms. Maria del Pilar Noriega Escobar and Ms. Tana Pistorius.
* Guidelines for the Customization of the IP Policy Template: An explanatory guide to adapt the IP Policy Template to the varied legal frameworks, cultural contexts, and local ecosystems in which institutions operate. Authors: Ms. Lien Verbauwhede Koglin, Ms. Kerry Faul and Mr. Richard Cahoon.
* IP Policy Writers’ Checklist: Practical guidance and step by step information on the different stages the process of creating or improving an IP Policy usually involves. Author: Ms. Lien Verbauwhede Koglin.
* Academic Intellectual Assets MAP: Designed to assist the Toolkit User to understand the broad scope of potential assets that an academic institution owns or may own. Prepared under the direction and management of Ms. Olga Spasić (Project Leader). Authors:
Mr. Steven Tan and Dr. John Fraser.
* Model Agreements: Compilation of agreements for knowledge and technology transfer transactions. Prepared under the direction and management of Ms. Olga Spasić (Project Leader). Author: Mr. D. Patrick O'Reilley.

Instructions for Moderators

We propose to take a step by step approach in considering above mentioned cases and situations. It is recommended to read and comprehend the background story, then to move on to read one section with the consecutive question that follows it, and encourage the participants to offer possible solutions and to discuss them.

Following such discussion, the moderator can present the proposed solution, before the participants are guided to read the next section. Proposed solutions appear at the end of each case study. Note that the proposed solutions are not necessarily the only possible solutions. The moderator can encourage the participants to raise alternative solutions and to discuss them.

Hypothetical Case Study 1 – Material Transfer Agreement (Commercial)

**Background Story**

Prof. Oleg Muler from the Chemistry Research Institute in Noskva has been working in the last twenty years on ITO (Indium, Tin and Oxygen), studying its unique properties and seeking for replacements.

ITO is a composition of three materials (Indium, Tin and Oxygen) in varying proportions. ITO is being used in many applications since it can be easily deposited as a thin film. It is widely used as transparent conducting oxides because of its electrical conductivity and optical transparency.

However, indium is expensive and its supply is limited; ITO layers are fragile and rigid; and a layer deposition requires vacuum and is therefore costly. As such, there is a real need for ITO replacements.

Prof. Muler’s dream was to find an alternative for ITO for flexible flat-panel displays applications. Following the advancements in nanotechnology, Prof. Muler found that films of graphene are flexible and have been shown to allow 90% transparency with a lower electrical resistance than standard ITO.

*“Few months ago, on January 21, 2016 - I remember this date since it is Eva’s (my grandchild) birthday, Mr. Thomas Dufinger, the Business Development Director in the technology transfer office (TTO) of my institute, approached me and was very interested to learn about my technology. He said that the institute has recently incorporated a fund called “CCT Fund” (Commercialization of Chemistry Technologies Fund) that its purpose is to invest a sum of up to 1,000,000 Euro in exciting technologies from the Chemistry Research Institute in Noskva that have high commercial potential. He was wondering if I was interested in applying for funding from the CCT Fund.”*

Mr. Dufinger explained to Prof. Muler that the first step in commercialization is to apply for a patent application with respect to the technology.

*“Dr. Doris Kev, a patent attorney and the head of the TTO Patent Dep. in the institute, met with me and explained to me the process of patent filing. I found it to be very exciting! The process of writing the patent application sharpened the advantages of my technology over other alternative technologies. Doris is a real expert and she made me think deeper and deeper throughout the various aspects of my invention.”*

The patent application was filed on March 17, 2016, and Mr. Dufinger scheduled a meeting with Prof. Muler the week after.

*“Mr. Dufinger complemented me on the smooth and effective process of patent filing due to my excellent collaboration with Doris. He said that the first step was completed, and now we need to move to the second step. The CCT fund requires industry feedback. I had no idea what was he talking about. Till then I was only familiar with academic collaborations, and had no experience with the business sector. How exactly should I obtain the industry feedback? I have no connections with industry players and I am not sure what would be a companies’ interest in giving me such feedback?”*

Mr. Dufinger explained to Prof. Muler that the industry is always looking for the “next big thing” especially from research institutions and universities that are known by their disruptive technologies, and their creative and open minded thinking that the set of academic freedom allows them.

It is often the case that prior to working on a full commercial transaction with a university (especially if the technology is in the form of a tangible material), the company is interested in performing a material evaluation at its own site with its own measures and quality control conditions to verify that the technology meets the company’s needs and expectations. Following a successful evaluation, the company is usually interested in engaging commercially with the university. Unsuccessful evaluation ceases the interaction with the university and the company does not spend time and money on establishing a full commercial transaction.

Two weeks later, Mr. Dufinger participated in a high-tech conference held in Korea in which various companies disclosed their technologies and expressed their interest in acquiring new technologies in their fields of interest.

A medium sized company called Nettux was highly interested in ITO replacements. Mr. Dufinger thought that this Company would be a very appropriate candidate for evaluating Prof. Muler’s technology. He approached the company’s representative during the conference and presented Prof. Muler’s technology. He was right as they were very interested in meeting with Prof. Muler and evaluating his technology.

A month has passed from the date of the conference and Mr. Dufinger received an MTA –Material Transfer Agreement - from Nettux. The Company wanted to receive a sample of Prof. Muler films of graphene (the “Material”) and evaluate it, in order for them to decide if it fits their industrial needs. He reviewed it briefly and was very surprised by some of the terms of the MTA. He knew there was no point in sending the company a revised draft since there are basic issues that first need to be discussed orally with the Company. He picked up the phone and dialed their number. Mr. Park, Nettux’ Business Officer answered.

“*Dear Mr. Park we are very pleased that your company wishes to evaluate Prof. Muler’s technology, we are very excited about this transaction which may eventually lead to commercialization. There are several issues in the MTA you sent that I would like to discuss with you,*” said Mr. Dufinger and outlined the issues below:

**1. Ownership of the evaluation results.**

**2. Rights of the Company to use the Material.**

**3. Rights of the Prof. Muler and the institute in the results of the evaluation.**

**4. ‘No- Shop’ provision.**

**5. Defining the evaluation program.**

**6. Report by the company.**

*“In the draft MTA it is written that Nettux will own all the results emanating from your evaluation of the Material. This is very problematic for us. As I mentioned to you in the conference, Prof. Muler’s technology is protected by a patent application. We need to be very careful regarding any new IP that may be developed through the use of this technology by third parties. Thus, we wish that the university will be the owner of the evaluation results. Should you find the technology interesting, we will be happy to license it to you upon completion of its development”* said Mr. Dufinger.

*“Dear Mr. Dufinger, your position is clear, however please note that Nettux uses its proprietary methods and materials during the performance of the evaluation and the evaluation results may incorporate IP relating thereto. Moreover, according to our policy we own the results of any work that is done by our people in our labs. You should not feel uncomfortable by us owning the results since they will probably be covered by your patent and for using it we will need to obtain a license from you”* said Mr. Parker.

Mr. Dufinger knew that Nettux is a big corporate with its own strict rules regarding ownership. “This issue is going to be a though one…”, he thought, he really wanted the company to provide industry feedback with respect to Prof. Muler technology for the purpose of applying to the CCT Fund, he was especially interested if the Material characteristics reach or, even better, exceed industry standards and in what parameters. He was not interested in obtaining rights to the Company’s methods or materials that were used for the evaluation.

1. ***Put yourself in Mr. Dufinger’s shoes for a minute, would you waive the ownership rights in the evaluation results? What kind of solution, in your opinion will suit both parties?***

In addition to owning the evaluation results, Nettux’ MTA specified the Company’s right to freely use the physical Material itself for its own internal purposes. The Company was very curious about the technology and wanted to keep the sample Material for further internal tests beyond the performance of the defined evaluation.

*“I do not understand your concern over this matter” said Mr. Parker. “It is only the physical material” which is protected by your patent. We only wish to examine it in-house. What’s the harm in that?”*

Mr. Dufinger was well aware of the risk of leaving the Material in Nettux’ hands without any restrictions. Indeed a patent application was filed with respect to the technology but it was not granted yet and such a capable industry player like Nettux, which is hungry for such solutions could easily explore the Material’s characteristics and “design around” it so that their competing material will not fall under the patent application.

1. ***Please suggest appropriate limitations to Nettux’ use of the material***

Their next topic for discussion was the Rights of Prof. Muler and the university to use the results of the company’s evaluation. Prof. Muler and Mr. Dufinger wanted to use the results for the purpose of applying for the CCT Fund and at a later stage for advancing the commercialization of the technology. After Mr. Dufinger agreed to omit the ownership section he needed to have the right to freely disclose the results to third parties. In parallel, he did not want Nettux to use the results in any way including disclosing them to third parties. The Company was supposed to use the results for internal evaluation purposes only. He said it to Mr. Parker, whom agreed to the concept, however raised the concern that part of the results may contain Nettux’ confidential information with respect to its methods of evaluation and materials for the purpose of the evaluation. They have reached an agreement regarding this issue and Mr. Dufinger wrote it down to himself.

1. ***Please suggest the agreed upon mechanism reached by Mr. Dufinger and Mr. Parker***

*“Now we need to discuss the No-Shop provision that you added to the MTA.”* said Mr. Dufinger.

A no-shop provision precludes the ‘seller’ (in this case the university) from soliciting other ‘buyers’ (in this case Nettux) for alternative offers for an agreed period of time.

*“We would like to delete this provision. Our technology is at a very early stage and we are in touch with several companies that wish to evaluate the Material. Your provision will prevent us from doing so”* added Mr. Dufinger.

*“Ooh, I believe that this provision is pretty standard in commercial transactions. You surely do not expect us to invest the time and money to evaluate your Material while you ‘shop’ for other buyers for it, right? We expect that you will not grant any right to a third party in the technology, including the right to evaluate it, or even negotiate such rights with a third party for a period of 180 days following the completion of the evaluation. By that time we will know whether we wish to license the technology or not”* said Mr. Parker.

Mr. Dufinger knew that such demand may come up. He was pretty sure that this technology was in a too ‘early stage’ for a company like Nettux to license it and he was actually interested in the company’s evaluation results as an “industry feedback”. Therefore, he had no reason to object a no-shop provision since he had no intention to offer the technology to other third parties at this stage.

*“In any event, if the company will find the results interesting at this early stage for commercialization I am sure that Prof. Muler will be more than happy to reach an agreement with it and give up the CCT funding”,* he thought to himself.

Nevertheless, Mr. Dufinger wanted to soften the no-shop provision offered by the company in order to keep his options open.

1. ***Please suggest a softer ‘no shop’ provision***

*“Dear Mr. Parker, you forgot to attach to the MTA the Company’s evaluation program. Could you please send it to me?”* asked Mr. Dufinger.

*“Sure,* said Mr. Parker*. Will a general paragraph stating that we intend to test the Material flexibility, transparency and strength will be enough?”*

It was not enough AT ALL knew both Mr. Dufinger and Mr. Muler. They wanted to know exactly the methods and scales of the different tests that will be performed by Nettux. First of all for the purpose of limiting the use of the Material by the Company only to the necessary agreed upon activities during the evaluation and secondly to be sure that none of these tests will lead inevitably to a failure. They both knew the flows of the Material and they had only one chance to impress Nettux and receive a positive industry feedback. It had to be the right evaluation plan with the agreed upon desirable criteria.

Mr. Parker understood Mr. Dufinger’s approach. However he was concerned about disclosing the Company’s exact criteria. Such information may lick to the company’s competitors.

1. ***Please suggest a solution that will overcome Mr. Parker’s problem and will be to the satisfaction of Mr. Dufinger and Mr. Muler***

“*We are left with one last issue - the evaluation report*” said Mr. Dufinger with much relief. The negotiations over the terms of the MTA took already two and a half hours. He was tired and wanted to conclude it already. “*Well, the devil is always in the details*”, he thought, and remembered that in another MTA that have been executed by the university few years ago, no reference was made to the level of details that is expected from the Company in its final report and eventually they received a very laconic report without the details that most important for them. “*We will not make the same mistake here*”, he thought to himself.

He shared with Mr. Parker his concern and asked for his advice.

“*We do not want you to be disappointed off course*; *we will write in the MTA that a detailed report will be provided to you, as customary by Nettux*.”

This was not good enough for Mr. Dufinger.

1. ***Please suggest an elegant and simple solution that will address Mr. Dufinger’s concerns***

**Proposed Solutions**

1. **IP Ownership**

Assuming Mr. Dufinger will carefully define the evaluation activities, the chances for development of new IP during performance of the activities are very low. Under such circumstances there is no actual meaning to “owning” the evaluation results which will eventually be a report describing the protected technology characteristics and whether they fail to reach or exceed industry standard. Therefore, Mr. Dufinger suggested to delete the ownership section altogether.

1. **Rights of the Company to Use the Material**

Mr. Dufinger objected Nettux’ request to be granted rights to freely use the Material for its internal purposes. He limited the Company’s rights to use the Material as follows:

A) The Company will be entitled to use the Material solely for the performance of the evaluation activities as described in Exhibit A to the MTA and during the evaluation period.

B) Following the completion of the evaluation or early termination of the MTA, Nettux will return the Material to the university or terminate it, per the university’s request.

1. **Rights of the Prof. Muler and the University in the Results of the Evaluation**

The following section was drafted by Mr. Dufinger:

A) The university and Prof. Muler will have the right to disclose the Results freely to any third party provided that such disclosure will not include any confidential information of Nettux. Following the completion of the evaluation and provision of the final report, should Nettux state that the report contain the Company’s confidential information, the Parties will agree on a redacted report from which such confidential information will be deleted. For the avoidance of doubt, the CCT Fund will not be considered a third party for the purpose on the MTA.

B) Nettux will not be entitled to use the Results for any purpose other than for internal evaluation or to disclose them to any third party.

1. **No-Shop Provision**

Nettux was not a small company, thus reaching formal evaluation decisions was not a short procedure for it. Mr. Dufinger was willing to offer to Nettux a ‘no shop’ period of 150 days, which was close to their request for a 180 days’ period, however he allocated such period as follows: 60 days for the Company’s notice if it wishes to enter into a licensing agreement with respect to the technology and additional 90 days to negotiate a license if such notice was granted. During such period Mr. Dufinger agreed not to negotiate or enter into any agreement with a third party relating to the technology.

1. **Defining the Evaluation Program**

Both Parties agreed on the methods of testing the Material characteristics. They also defined what is the range of results that will be considered as ‘success’ with respect to the main features of the Material: transparency, flexibility and conductivity. For example with respect to the

Material flexibility, results obtained below the range will be considered a ‘failure’ to meet the desired results. Results obtained within the range or above it will be considered “success’ to meet the desired results.

1. **Report by the Company**

Mr. Dufinger suggested to Mr. Parker that they will attached to the MTA a form of a final report with level of details satisfactory to the university and Nettux will fill in the appropriate data upon the completion of the evaluation.

Hypothetical Case Study 2 – Exclusive License Agreement

**Background Story**

Mr. William Crops, the Head of the Technology Transfer Office (TTO) of Kamden University in London, was groaning to himself as he was walking towards Union Hall. In a few minutes he is about to present to the CTO of Daxter International Inc., the multinational medical device company, three technologies originated in the university that may potentially interest him.

Usually, such meetings are conducted by Dr. Maura Li, the Business Development Director in the field of medical devices. However, in the last minute he had to replace her since her son was sick and she had to leave the office immediately. William assumed that this meeting, like others before, will mostly include hands shaking, business cards exchange and tired smiles. He never thought that Prof. Regev’s Tube Technology will be the big winner of this unexpected introduction meeting.

Prof. Regev from the Medical School of the university invented a biological ‘tube’ that was able to manipulate neuronal growth and activities (the “Tube Technology”). He has demonstrated that rats with spinal cord injuries could walk again, following the implant of his tubes, and at the time it rocked the scientific community. The invention was protected by registered patents in the US and Europe which were granted three years ago.

Nevertheless, the Tube Technology was close to be labeled by the TTO as a ‘LCC’ (Low Chances for Commercialization) technology, due to the fact that Prof. Regev, Prof. Emeritus by now, was very sick and could not actively support the commercialization of the technology.

Daxter International Inc. was a global medical device company with $5B annual revenue. What William did not know was that Daxter has recently formed an Innovation Unit and the Tube Technology fitted precisely to the early stage high risk, but potentially high return, technology profile they were looking for.

Right after the presentation, they asked William for more information about the Tube Technology and two months later, a business team and a technical team came to London to discuss the development plan, and the license terms. To William’s surprise, the commercial team was very sharp and goal oriented during their visit, they wanted to obtain a worldwide exclusive license to Prof. Regev’s technology and were willing to pay generously for it.

In this case study the following issues will be discussed and elaborated:

**1. Exclusive license in a specific field as opposed to all fields.**

**2. Exclusive vs. Non Exclusive license in Know-How.**

**3. License back in the technology to the university.**

**4. Typical Commercial terms in exclusive license agreements.**

**5. The importance of proper termination sections in license agreements.**

The technical team met with William, Maura and Prof. Regev and discussed various scientific aspects of the Tube Technology. They had very good and challenging questions and William felt that indeed Daxter is an appropriate licensee. They have started drafting together the Company’s initial development plan and agreed on the next necessary steps in order to perform a proof of concept according to industry standards.

In parallel, the business team set with Maura and Keren Limor, the TTO’s General Counsel to discuss the terms of the exclusive license agreement.

*“I understand that the field of the license is ‘treatment of spinal cord injuries’ is this correct?”* asked Keren.

It is customary that exclusive licenses granted by universities are limited to a specific field in which the Company is interested in and is experienced with. The reason is that the university wants to make sure that each potential field of a certain technology will be commercially exploited by appropriate licensee with right expertise and resources. It is only natural that a Company will invest its efforts and funding resources in developing products in a specific field. By granting exclusive license to a company without field limitation, the technology will most probably be ‘shelved’ with respect to all other potential fields.

Mr. George Rowly who led the business negotiation on Daxter’s side made an awkward face and was looking at his colleagues.

*“Well, we were actually expecting to receive an exclusive license in all fields. This technology is at a very early stage. Indeed the development program will commence with a proof of concept with respect to spinal cord injuries, however we do not know yet what will be the chosen application or field for development of a product by Daxter.” said George.*

Maura quickly wrote a note to Keren, in which she agreed with George’s analysis. Keren nodded to her and smiled, she thought of a mechanism that could work for both Parties with respect to the field of the license.

1. ***What do you think was Keren’s suggested mechanism?***

“A lot of valuable know-how was gathered during the years by Prof. Regev, regarding the Tube Technology. Know-how that does not appear in the patents and was not otherwise published”, stated Keren.

“Yes, our technical team was very impressed by that know-how. Prof. Regev indeed examined a lot of aspects in this technology along the years and such know-how will be very useful for us. We would like off-course to include it in the exclusive license” said George.

Maura almost jumped from her chair in response to George words and said: “this will not be possible, we are only able to grant Daxter a non-exclusive license in such know-how”.

George looked very disappointed; he did not understand why Daxter is prohibited from obtaining an exclusive license in the know-how. He was sent to London with a defined mission – to close the terms of an exclusive license to the entire package of the Tube Technology. Was he about to fail in his mission?

*“Let me explain, the rationale behind it” said Keren. “The Tube Technology is based on know-how that was developed during a period of thirty years by Prof. Regev. During that time, generations of students that became faculty members used this know-how to develop other technologies that do not fall under the Tube Technology patents. Some of these technologies are currently licensed to third parties along with the know-how that was granted to them on a non-exclusive basis.”*

George understood Keren’s explanation; the know-how was generic and it was a legal constraint that he had to live with. He was wondering if such term should have any influence on the level of consideration payable to the university for the license.

1. ***Can George claim that non-exclusive license in the know-how worth less than an exclusive one and ask for a lower royalty rate?***

*“OK, great! I am ready to move to the next section, we have already spent a lot of time on the Grant of License section,”* said George and smiled.

What was funny about George was that when he smiled his eyes were smiling too. Maura loved that about people and it made her smile as well. However they were not done with this section yet. She had to bring up the “License back” issue.

*“We need to retain the right of Prof. Regev and other university personnel to continue their use of the Tube Technology for academic and research purposes.”* she said.

George was surprised. *“Didn’t you agree a few minutes ago to grant Daxter an exclusive license in the technology? Other than the know-how off-course. Exclusivity means that all other persons or entities are prohibited from using the technology.”*

Maura was ready with her answer. It is not the first time that an explanation is required with respect to this issue. At that moment she understood that it’s the first time that Daxter was doing business with an academic institution.

*“Close your eyes George and imagine to yourself, a Professor that for the past thirty years has been working on a certain technology in his laboratory and one day he is told that he cannot work on it anymore. His academic career is suddenly stopped and his ability to use his expertise is ceased. Now imagine Prof. Regev when you tell him that.”*

George opened his eyes. Maura’s explanation was very clear. He understood that a deal will not take place without granting the university the right to continue the research on the technology. However, George wanted to limit such right as much as possible in a manner that will still address the university’s concern.

1. ***Please offer suggested phrasing for George***

*“Now we should discuss the financials” said Maura. “We have a typical structure of required considerations and…”*

*“No need to continue”* said George. Maura thought that he was a bit rude about the way he interfered her however she let him continue. From her experience in negotiations, it was always better to first get an offer from the other side. Information is power and can be used later in the negotiation.

“We are willing to pay the university a one-time payment of ten million US Dollars upon execution of the agreement.” He said and waited to see Maura’s and Keren’s response.

It was a generous offer as far as George was concerned. The Tube Technology was at a very early stage of development. Millions of dollars will have to be invested by Daxter in order to take this technology all the way to an approved medical device and Daxter was willing to take all the risk.

Maura and Keren were familiar with the state of mind that George was in, they saw it before in other negotiations. However they had their own business frame they had to work with as a TTO.

Keren explained to George that the way TTOs are structuring their considerations under a license reflects their deep belief that the licensed technology will eventually become a successful product. They are willing to share the risk and expect in return to enjoy the profit. As opposed to receiving a substantial amount upon execution of the agreement which is not correlated with the success or failure of the technology, they rather obtain relatively modest amounts during the development stages in points where there is an increase in the company’s value as a result of a positive progress in the technology’s development, and royalties from sale of products, if the technology indeed is materializes into a product. Upon a success scenario, which is relatively low according to market statistics, the royalties will total to a much substantial amount than the suggested one-time payment.

*“What did you have in mind?”* asked George.

1. ***Please help Maura and Keren draft the consideration section***

Now they were discussing the termination sections of the license. Maura had an early discussion with Prof. Regev about the issue of license termination. He was very concerned that Daxter, being a multinational company with a very big ‘pipe line’ of products under development stages, will decide after a certain period of time that it is not interested anymore in developing his technology and will terminate the license. Maura explained to him that this might indeed happen. Universities cannot force a licensee to develop a technology if such licensee decides at a certain point in time to terminate the license due to scientific, financial, change in strategic direction or other reason. All these reasons are legitimate. License agreements typically include a term according to which the licensee is allowed to terminate the license for any reason upon prior written notice to the university. Now Prof. Regev was even more concerned. He asked what will happen to his technology upon termination of the license. Maura told him that upon termination of the license the university will be able to license it again to other licensees. Prof. Regev was not sure he fully understood this approach since by the time of termination, the technology will be left with fewer years of patent protection and its value will decrease substantially. Moreover, he was wondering what will happen to all of Daxter’s development results emanated in connection with his technology. Maura told him not to worry, that they are taking into consideration all these aspects when they phrase the termination sections in the Agreement.

“*The termination concept is as follows*”, said Keren to George, “*the university can terminate the license only upon a material breach by Daxter of its obligations under the agreement or upon circumstances of bankruptcy or challenge by Daxter of the university patents. Daxter on the other hand may terminate the license for any reason or for no reason at any stage upon prior written notice to the university.*”

“*So what’s the catch?*” asked George.

“It’s not really a catch” said Keren. “*It’s a reasonable compensation for the lost life span of the technology.*" And she explained to him the rationale of their “Effect of Termination” section.

1. ***What provisions in your opinion should be included in such section?***

**Proposed Solutions**

1. ***Exclusive license in a specific field as opposed to all fields***

Keren suggested that upon execution of the license agreement, the Company’s license will not be limited to a certain field. Within 12 months of the execution date, the Company will inform the university about the field in which it intends to develop the product and provide it with a detailed development plan. Upon such notice, the license agreement automatically will be limited to the field described by the Company. In the event that the Company will request to be granted a license in more than one field, the university will not unreasonably reject such request upon the Company’s submission of an appropriate additional development plan along with an obligation to invest the required funding for the performance of such plan. Following an initial approval by the university to add an additional field, the Parties will discuss it in good faith the commercial terms with respect to such field.

1. ***Exclusive vs. non-exclusive license in know-how***

Usually an exclusive license is valued higher than a non-exclusive one because the licensee can benefit more if competition is avoided. Keren will argue that even though the university can’t grant an exclusive license, practically, Daxter will have exclusivity in using the know-how for the exploitation of the Tube Technology. Since the license to the Tube Technology Patents is granted on an exclusive basis, no other third party can use the know-how for the same purpose. George will argue that following the expiration of the Tube Patents, Daxter will lose the said exclusivity of using the know-how in connection with the Tube Technology and therefore Daxter will enjoy the said exclusivity only for a limited time period. The royalty rate should reflect the value of an exclusive license during the life of the patents and a lower value of a non-exclusive license thereafter during the remaining royalty period. Keren agreed to a 70% drop down in the royalties during the remaining royalty period following the expiration of the patents.

1. ***License back in the technology to the university***

George offered the following phrasing to Maura:

“The university will retain the rights to practice and utilize the Tube Technology solely for academic research purposes. Materials that covered by the Tube Patents will be sent to researchers from other academic institutions who wish to study them only under a material transfer agreement that will be approved in advance by the Company and make sure that the Company’s rights under the license agreement are not compromised. For the avoidance of doubt, performing a research in the university with funding of a commercial entity shall not be considered academic research.”

1. ***Typical commercial terms in exclusive license agreements***

In consideration for the rights and licenses granted to Daxter, it shall pay to the university the following consideration:

**4.1** **Upfront License Fee**. Daxter shall pay the university a non-refundable license fee in the aggregate amount of $1,500,000 within 30 days of the effective date.

**4.2** **Royalty Payments.**

4.2.1. Royalty Rate: Daxter will pay the university a royalty of 6.5% of Net Sales of Products by Daxter, its Affiliates and Sublicensees.

4.2.2. Royalty Period: The royalty set forth in Section 4.2 will be payable during a period which shall commence on the Effective Date and shall continue on a country-by-country, Product-by- Product basis, for the longer of: (a) fifteen (15) years from the date of the First Commercial Sale of such Product in such country; and (b) until the last to expire of the Patents in such country.

**4.3** **Sublicense Receipts.** Daxter shall pay the university 27% of all Sublicense Receipts.

**4.4.** **Minimum Annual Royalty.** Daxter shall pay to the university a minimum annual royalty payment in an aggregate amount as follows with respect to each Product, which payments shall be fully creditable against running royalties owed to the university under Section 4.2 with respect to such Product:

(i) On January 1st of the first full Calendar Year after FDA approval of the Product - $100,000; and

(ii) On January 1st of the second Calendar Year - $150,000; and

(iii) On January 1st of the third Calendar Year and any subsequent Calendar Year during the Royalty Period - $250,000.

**4.5.** **Milestone Payments.** Daxter shall pay to the university the development milestone payments set forth below, on the first occasion that the relevant milestone is achieved with respect to a Product.

(i) Commencement of Phase I Trial - $500,000;

(ii) Successful completion of Phase III Trial - $1,000,000.

(iii) Receipt of FDA approval - $1,000,000;

(iv) Receipt of CE approval - $1,000,000;

(v) First Commercial Sale of a Product - $1,500,000;

1. ***The importance of proper termination sections in license agreements***

**Effect of Termination:**

**5.1 Termination of Rights.** Upon termination of the license all rights in and to the Tube Technology shall revert to the university, and Daxter and its Affiliates and Sublicensees shall not be entitled to make any further use whatsoever of or practice the Tube Technology, nor shall the Company or its Sublicensees develop, make, have made, use, offer to sell, sell, have sold, import, export, otherwise transfer physical possession of or otherwise transfer title to Products incorporating the Tube Technology;

**5.2. Transfer of Regulatory Filings and Know How.** Upon termination of the license, Daxter shall assign and transfer to the university:

(i) all documents and other materials filed by or on behalf of Daxter, its Affiliates and its Sublicensees with Regulatory Agencies in furtherance of applications for Regulatory Approval in the relevant country with respect to Products incorporating the Tube Technology; and

(ii) all intellectual property, know-how, inventions, conceptions, compositions, materials, methods, processes, data, information, records, results, studies and analyses, discovered or acquired by, or on behalf of Daxter its Affiliates and its Sublicensees which relate to actual or potential Products incorporating the Tube Technology.

Hypothetical Case Study 3 – Contract Research Agreement

**Background Story**

Angelino, a research-based pharmaceutical company located in Rome, Italy, was interested in studying the protective effect of a derivative of their Emapoglifin drug (currently used for the treatment of Type 2 diabetes) (the “Derivative”) on patients that have Type 1 Diabetes.

An in vivo study performed by the company had shown a surprising and unanticipated protective effect of the Derivative over mouse with Type 1 diabetes. Apparently, the Derivative was able to stimulate the growth of insulin producing cells in Type 1 Diabetic mice, thereby (partly) reversing the cause of Type 1 Diabetes.

Type 2 Diabetes which is a long-term metabolic disorder is characterized by high blood sugar, insulin resistance, and relative lack of insulin. Often the symptoms come on slowly. The causes for such disorder are primarily obesity and lack of exercise. Nevertheless, some people are more genetically at risk than others.

Type 1 Diabetes, on the other hand, is a form of diabetes in which not enough insulin is produced. This results in high blood sugar levels in the body. Symptoms typically develop over a short period of time. The cause of Type 1 Diabetes is unknown. However, it is believed to involve a combination of genetic and environmental factors. Risk factors include having a family member with the condition. The underlying mechanism involves an autoimmune destruction of the insulin-producing beta cells in the pancreas.

Abriana Marciano, Angelino’s CEO and its legendary founder, knew that the scientific and commercial potential impact of succeeding in such a study will be huge, and she will be able to obtain the high investment needed in order to develop such derivative to a drug for Type 1 Diabetes and help all the disease’s suffering patients.

The key for succeeding in such study, knew Abriana, was finding the right evidences. In the process of researching human diseases, advanced simulations allow the researcher to better understand the disease process without harming a human being. In recent years, bioinformatics tools and deep learning algorithms allow researchers to simulate metabolic equivalency to humans, so that it will react to disease or its treatment in a way that resembles human physiology. Such tools can provide Abriana with the evidences she needed.

*If a computer simulation will indeed prove a protective effect, this might be sufficient to start clinical studies, as the Emapoglifin is already allowed for clinical use. This would substantially shorten the development time and reduce development costs of this new drug*, thought Abriana.

Prof. Rachel Ben-Ari from Riev University was known for her unique expertise in developing and operating the most advanced simulation software. Her papers, where she has simulated human reactions to drugs, have been published in leading journals and researchers around the world wanted to collaborate with her and use her model to explore new drugs.

In 2017 Prof. Ben-Ari presented her know-how in the International Congress for Diabetes held in Napoli, Italy. Abriana was present in the presentation and was very excited. She felt that she finally found the right tool for her study.

*“I remember that at the end of my lecture, an impressive tall lady came to me and presented herself as the CEO and founder of an Italian pharmaceutical company. She spoke very fast and with an Italian accent. I didn’t understand all she said but was sure of one thing: she wanted to

collaborate with me and use my software to check one of her company’s drugs. I told her that I will be happy to further discuss potential collaboration with her and invited her to visit my lab at the University. I remember her big smile, she was very happy with my invitation”.*

A month and a half later, Abriana visited Prof. Ben-Ari’s lab. They had fruitful discussions during her two days visit and agreed to commence their collaboration as promptly as possible.

*“Right after Abriana’s visit I approached my dean and updated her with the expected research funding I am about to receive from Angelino. The budget was 200,000 Euro and I remember we were both very pleased about it. The dean asked me to approach our TTO, where I was informed that my software was not protected by a patent and that we should be careful in the way we phrase the agreement with Angelino. I was concerned, this simulation package was my “baby”, but Dr. Zumer from the TTO reassured me that they have studied how to draft agreements under these circumstances.”*

Dr. Zumer sent Prof. Ben-Ari the first draft of the Contract Research Agreement a week after their meeting.

*“I thought that the agreement was pretty straight forward. The research plan was accurately described. I was supposed to run the company’s Derivative against Type 1 Diabetes in my simulation software. The research period was 12 months and the consideration was 200,000 Euro. I called Dr. Zumer and asked where I should place my signature.”*

Dr. Zumer explained Prof. Ben-Ari that this is only a first draft of the agreement and that they should internally discuss some major issues the appears therein. She also mentioned that after the first draft is sent, a negotiation process will most probably take place.

They met in the next morning and Dr. Zumer chose to begin their discussion with the ownership issue.

*“I don’t understand what is so complicated. This is my simulation software; all the results should belong to me. I will off course disclose them to Abriana, however if the company would like to use them, it should obtain my permission and pay for it, am I wrong?”*

Dr. Zumer reminded Prof. Ben-Ari that the Derivative is the proprietary of the Company (protected by its patents) and that testing it against Type 1 Diabetes was the Company’s idea. The Company will probably expect that for their 200,000 Euro, they will own all the research results and research deliverables.

*“I never thought of it like that. Dr. Zumer had a very good point; however, I wanted to protect my software simulation and was afraid that by giving ownership to all the research results I will eventually provide rights to my software. This was not my intention at all!”*

1. ***What do you think was Dr. Zummer’s ownership position?***

During Dr. Zumer’s explanations regarding her ownership position, she made a distinction between having ownership rights in an asset and having contractual rights to use such asset.

Property rights in an asset are rights that are enforceable against all other persons or entities. Contractual rights, however, are rights that are enforceable only against the particular persons or entity with which there is an agreement. Contractual rights are granted pursuant to the terms of the contract and are usually limited to certain uses, specific fields, period of time and also may be terminated by the other party. Property rights are basic fundamental rights and deprivation of possessions is subject only to certain specific conditions defined by law.

*“Dr. Zumer asked me to prepare a list specifying the rights that in my opinion both parties are expecting to obtain from the collaboration. I told her that Abriana wishes that the research results will form as her initial “proof of concept” for using the Derivative as a drug for Type 1 Diabetes. Following positive results she would like to disclose them to her Board of Directors, potential investors and collaborators and, in a later stage try and achieve the same results in clinical trials. I, on the other hand, would like to publish the results which will provide my software simulation additional strong validation, to be able to use the simulation of the Derivative for research of other diseases in academic setting, and off course to freely use any improvement or derivative of my software if such will be emanated during the research.”*

Dr. Zumer wrote down the applicable contractual rights.

1. ***What do you think are the contractual rights that should be written down by Dr. Zumer?***

Prof. Ben-Ari mentioned that the publication right is highly important to her. However, the issue of confidentiality was no less important to Abriana as well. She had substantial arguments against publication with respect to both positive and negative results. While positive results, which initially prove the Derivative’s potential for treatment of Type 1 Diabetes were desirable, she would wish to keep them confidential as long as possible in order to prevent competitors to enter into the market with similar molecules. Her aim was to disclose the results only to potential investors and collaborators under non-disclosure agreements. Negative results will surely disappoint her. However she may still want to conduct further studies by other means or explore other uses for the Derivative all of which will require funding and wouldn’t want the Derivative to be “burned” following a negative publication.

*“I was frustrated. How can we overcome the Company’s sensitivities and still publish the results? Dr. Zumer said that we should come up with a mechanism that both parties will feel comfortable with.”*

1. ***Please suggest ways in which the company’s concerns will be considered and addressed without limiting Prof. Ben-Ari’s right to publish***

*“Dr. Zumer told me we should discuss the deliverables of my research. It was obvious as far as I was concerned. Abriana was interested in the bottom line, whether the Derivative works as a treatment against Type 1 Diabetes according to my simulation software. I was about to send her a final report with my conclusion following the completion of my research”.*

It was the truth that Abriana was interested in the bottom line; however she wanted to closely follow the research and its progress. Prof. Ben-Ari was required to repeat the simulation three times during the research period in order to verify the results and in each time to perform a parallel simulation with respect to an agreed upon ‘off the shelf’ molecule that is currently used for the treatment of Type 1 Diabetes, for comparison purposes. Following each set of simulations, Prof. Ben-Ari was supposed to compare the two sets of results and analyze them.

Abriana wanted to receive reports, updates and probably all the raw data obtained during the research. Dr. Zumer knew that, so she agreed with Prof. Ben-Ari on four (4) deliverables, with the intention of offering two deliverables in her first draft, and to compromise if needed on up to four (4). There was no doubt that the less deliverables meant fewer burdens for Prof. Ben-Ari which was a very busy scientist.

They both agreed that **no** raw data should be submitted to the Company. The software algorithm was not protected by a patent application, therefore raw data obtained during the research might disclose the methods according to which such simulation software is operating and therefore should not be submitted to the company.

1. ***What kind of deliverables would you offer to the company?***

*“Dr. Zumer asked me if I thought about the payment schedule. Actually it did not cross my mind. Until today my research activities have been sponsored by grants and not by companies and they were usually received in a onetime payment prior to commencing the research. Suddenly, I remembered that Abriana said something about payment schedule contingent upon success and achievement of deliverables. I did not really pay attention to these statements at the time. I was so excited about the science and the collaboration that all the money issue did not bother me. I updated Dr. Zumer and she already had an answer for me.”*

Obviously Abriana did not want to pay in advance 200,000 EU without knowing how will the research progress and what will be its results, however it was clear that Prof. Ben Ari had no intention to fund the research activities from her budget and be reimbursed by the Company only upon positive results. Rightfully she was not willing to take that risk.

Dr. Zumer knew that, thus she drafted a payment schedule according to which Abriana will be able to terminate the research under certain circumstances while still all research activities performed by Prof. Ben-Ari will be covered.

1. ***Please suggest an appropriate payment schedule***

*“One last thing before I go, I wanted to explain to you the issues of no liability and indemnification. This is the part in the agreement that the researchers usually skip because it looks to them like long exhaustive and complicated legal clauses… said to me Dr. Zumer and laughed. These sections deal with the allocation of risk. Who will bear the legal risk and be subject to financial exposure under certain circumstances, she explained. This sounds more logical, I thought.”*

The Derivative was the property of the Company, the research was performed on the Company’s behalf and funded by the Company, the Company intended to further develop the Derivative and invest its resources, based on the research results. Dr. Zumer explained that under these circumstances, it is clear that the university should not be liable to the Company’s use of the results. Moreover, should the university suffer any damage or loss by a third party in connection with such use by the Company of the results, the Company should indemnify it (provide security for financial reimbursement).

*“I asked Dr. Zumer if the Company may object to these sections and on what grounds? She said that indeed this may happen. However, these sections reflect common practice of universities that are not willing to be exposed as a result of commercial use of academic research results.”*

1. ***The company may request some exceptions to the no liability and indemnification sections, what might these be? And what will be acceptable to the university?***

**Proposed Solutions**

1. ***Ownership***

Each Party will remain the owner of its own *background IP*. The Company will remain the owner of the Derivative and the university the owner of the software simulation.

The Company will own all research results relating solely to the Derivative (“Company’s Results”) and the university will own all the research results relating to the Software Simulation including any software derivatives, updates and improvements (“University’s Results”).

1. ***Contractual rights granted in the research results and in the derivative***

A) Prof. Ben-Ari will have the right to publish the Company’s Results pursuant to the publication mechanism described in the agreement (see section 3 below).

B) Prof. Ben-Ari will have the right to use the Derivative (1) for the purpose of performing the research; and (2) for research and academic purposes in all fields with the exception of Diabetes applications.

1. ***Publication rights***

A) Thirty days prior to any publication or presentation of the research results by Prof. Ben-Ari, she will submit to the Company the draft publication for its review and comments.

B) The Company will be entitled to require the deletion of any of the Company’s confidential information, provided that the research results themselves will not be considered the Company’s confidential information.

C) The Company will be entitled to delay publication for up to 60 days for the purpose of filing a patent application to protect the Company’s Results.

D) Prof. Ben-Ari will provide proper credit to the Company as the sponsor of the research and the owner of the derivative.

E) It is agreed by the parties that negative results are not considered results of high scientific value. Nevertheless, in the event that Prof. Ben-Ari will insist on publishing them, only the Derivative’s general characteristics will be included in the publication and not its name. In such publication the Company’s name will not be mentioned as well.

F) Prof. Ben-Ari will consider in good faith the Company’s comments to the suggested publication as long as such comments will not derogate from the publication’s scientific value.

1. ***Deliverables of the research***

A) 1. Six months following the commencement of the research, an interim report summarizing the results obtained with respect to the Company’s derivative and with the ‘off the shelf’ molecule.

2. Sixty days following the end of the research period, a final report summarizing the results obtained during the research period with respect to the Company’s derivative and the ‘off the shelf’ molecule, together with a comparable analysis of the two molecules.

B) [*Optional*] In addition to the reports specified in A1 and A2, two additional interim reports similar in their content to A1, following the first and the third set of simulations which will be submitted three months and nine months, following the commencement of the research.

1. ***Payment schedule***

A) 50,000 Euro upon the effective date of the agreement;

B) 50,000 Euro following receipt by the Company of the first interim report (three months following the commencement of the research) and the Company “Go” decision to commence the second simulation;

C) 50,000 Euro following receipt by the Company of the second interim report (six months following the commencement of the research) and the Company “Go” decision to commence the third simulation;

D) 50,000 Euro following receipt by the Company of the final report.

The Company shall be entitled to terminate the funding of the research prior to the commencement of the second simulation or prior to the commencement of the third simulation. Notwithstanding the aforesaid, in such event, the Company will pay to Prof. Ben-Ari (through the university) any non-cancellable expense incurred by Prof. Ben-Ari in connection with the performance of the research.

1. ***No liability and indemnification sections***

The principle according to which the university will not be liable to any damages or claims arising as a result of the use by the Company or anyone on its behalf in the Company’s Results was acceptable to the Company, however it would request to exclude from the no liability and indemnification obligation circumstances where such liability, damage, loss or expense is attributable to the researcher’s fraud, negligence or willful misconduct.

The university should try to narrow the negligence exception to a gross negligence exception and that such exceptions will apply only if according to a final and un-appealable court decision the researcher’s acts were defined as fraud, gross negligence or willful misconduct.

Hypothetical Case Study 4 – Collaborative Research Agreement with Company

**Background Story**

Prof. Dino Goldman from the school of Medicine in UKLA has been working for years now on enzyme inhibitors.

“*I was never considered the brightest researcher in the school of Medicine nor the most organized or perfectionist one. However, it was clear that I was gifted with out of the Kit thinking. Throughout my long academic career, this characteristic was the most remarkable one*”.

The above quote appeared in the Bio Magazine after Prof. Goldman was asked to say a few words about his latest outstanding invention on new innovative set of enzyme inhibitors.

Enzyme inhibitor is a molecule that binds to an enzyme and decreases its activity. Since blocking enzyme activity can kill a pathogen or correct a metabolic imbalance, many drugs are enzyme inhibitors so their discovery and improvement is an active area of research in biochemistry and pharmacology.

Prof. Goldman’s set of enzyme inhibitors were unique due to their ability to be of extremely high specificity and potency. He knew how to engineer them that way.

Ms. Rejina Hampton, the CEO of the technology transfer office (TTO) handling the commercialization of UKLA intellectual property, knew that she was holding “pure gold” in her hands, in terms of commercializing Prof. Goldman’s new materials to the Pharmaceutical Industry. Following a thorough analysis of the best commercialization path, it was decided that Mr. Rolando Terrol, the Business Development Director in charge of Life Science technologies in the TTO will approach several reputable manufacturers and suppliers of enzyme inhibitors. Such companies will be able to manufacture Prof. Goldman’s new molecules and sell them to multiple pharmaceutical companies.

Rosenta Inc., a global U.S based company supplying intermediate chemicals to the life science industry was already selling various kinds of enzyme inhibitors to its customers. Rosenta was approached by the TTO and its CEO, Dr. Luna Tori, felt very lucky that her company was eventually chosen as a manufacturer and supplier of Prof. Goldman’s new molecules.

During the negotiations over the license agreement, Luna (a Chemist in her education) met Prof. Goldman several times in order to work with him on the refinement and optimization of the molecules to be consistent, precise and reproducible for mass production.

During their fruitful discussions, Luna raised new ideas for the use of Prof. Goldman’s molecules for various applications in the **food industry**. Such path did not cross Prof. Goldman’s or the TTO personnel’s mind. A whole new market was surprisingly opened to them and it was agreed by all parties that further research in that direction was required.

Dr. Tori offered to conduct a collaborative research with Prof. Goldman to explore several specific applications she had in mind for the food industry. She knew, from her commercial experience, that there is a market for such applications and already had potential customers that she could approach to in this regard.

Rolando was very excited about this new commercialization path. However, he was concerned that such collaboration may affect or limit the university’s ability to fully exploit the commercial

potential of the technology in other fields and with other partners. He was troubled by these thoughts as he sat down with the TTO’s legal counsel Adv. Roni Lang to draft the research collaborative agreement.

“*In order to draft the agreement properly there are some basic issues you need to sort out with the Company first. Following the conclusion of these issues with the company, I will promptly prepare a first draft of the agreement*.” said Roni and outlined the issues below:

**1. Ownership over the results of the Collaborative Research.**

**2. The legal dependency between Prof. Goldman existing umbrella patents and the potential new patents and their influence on other agreement terms.**

**3. Definition of Field of use and rights granted to the Company with respect to the results of the Collaborative Research.**

**4. Research Funding rights and obligations.**

**5. Patent Administration issues.**

**6. Publication issue.**

Rolando met Luna, a few days later and brought up the important issues that Roni outlined.

This first one was the ownership issue. It was very clear to Luna that all the results of the collaborative research should belong to Rosenta. She came to this conclusion because Rosenta will be sponsoring the entire research project, and the idea of developing and exploiting Prof. Goldman’s technology for food applications was hers. Rolando, on the other hand, naturally thought that ownership should vest in the university because the collaborative research will be based on Prof. Goldman’s substantial existing IP and most of the work will be done by Prof. Goldman and his team in his laboratory. Both Luna and Rolando understood each other’s rationale, however were not able to find an amicable solution.

1. ***Please suggest a solution that may be acceptable to both parties***

*“I would like to manage the prosecution and maintenance of the patent applications and patents developed under this collaborative research”* said Luna.

Usually all the IP portfolio was managed by the TTO’s patent department to ensure proper handling of the interests of the university, however in cases of a joint patents with companies, Rolando sometimes agreed that the company will manage the prosecution and maintenance of the patent portfolio subject to such company being a big corporation with experienced patent department. He almost agreed when he realized that most probably all patent applications emanating from the collaborative research will be dominated by Prof. Goldman’s patents.

1. ***What do you think should be Rolando’s decision in this regard?***

Following their discussion on who will manage the patents, Luna suddenly realized that for commercially exploiting the results without being exposed to patent infringement claims, Rosenta also needed to obtain a license to Prof. Goldman’s existing IP for food applications.

Rolando agreed that this was indeed the case, however started thinking if there should be legal dependency between the two potential agreements: (1) the original license to manufacture and sale the molecules in the field of life science; and (2) the collaborative research agreement and the license to develop and commercialize the molecules for food applications.

1. ***What do you think should be the university’s position in this issue?***

*“We are talking all the time on food applications; however the collaborative research results may be applicable also to other fields. Since we agreed that the results will be jointly owned, I would like to have the right to use them in any relevant field.”* said Luna.

Rolando was upset to hear this position, he was afraid exactly from this kind of ‘IP contamination’ when he started his negotiations with Luna. Prof. Goldman’s technology and its clear commercialization path were too valuable to the university; he couldn’t afford to agree to such request. Once the collaborative research commences it’s very hard to cease the innovation and progress being made by both parties. It was very important for him to contractually set the boundaries.

1. ***What do you think was Rolando’s response and suggested mechanism?***

The collaborative research was supposed to take place mostly in Prof. Goldman’s laboratory. Rosenta agreed to fund the additional costs of the research program. Prior to his meeting with Luna Rolando requested Prof. Goldman to provide him with a detailed budget.

In order to perform his part of the research, Prof. Goldman needed to purchase certain materials and a unique microscope. He also needed to hire two technicians. He submitted the budget to Rolando adding to it also a salary for himself.

Rolando looked at the budget and quickly understood that he had a problem. The budget totaled to $250,000 which was indeed the sum that Luna mentioned. However, it did not include the 40% overhead of the University. Following addition of the University’s overhead the budget totaled to $350,000.

Surprisingly, when he told that to Luna she chose not to make a fuss and only said that she will have to approach her Board of Directors, but pretty sure that it will be approved. Rolando felt relieved. He then also mentioned that it is customary that any equipment that is being purchased by the University as part of a collaborative research with a company becomes the property of the University. Luna agreed also to this principle.

The payment schedule was next. Luna wanted to pay the total amount of research funding following receipt of a final report from Prof. Goldman. This was very problematic. Prof. Goldman had to buy the materials and microscope prior to the commencement of the research and did not want to incur any out of pocket expenses. In addition he had to pay monthly salaries to the technicians. Rolando suggested another payment schedule to Luna.

1. ***Please suggest a reasonable payment schedule for the research funding***

*“Luna, we need to agree on a late payment mechanism”* said Rolando.

*“This is really embarrassing; do you think that Rosenta will not pay you in time? We are a reputable company with deep pockets, this will never happen.”* said Luna.

Rolando smiled to her and explained that it is not a ‘trust’ issue, rather than a provision they will hopefully never use, however needed as a negative incentive to pay in time. He suggested their regular mechanism.

1. ***Please suggest a late payment mechanism***

It was agreed that the university will manage the patent protection of the collaborative research results; however the mechanism was not agreed yet.

*“I would like that all decisions with respect to the patents will be made jointly in consensus by Rosenta and the university,”* said Luna. Rolando knew from his experience that such mechanism is very nice ‘on paper’ however does not work in real life. Someone needs to say the ‘final word’ to the patent attorney whom should eventually take action in very tight time line. Rolando suggested setting a consulting mechanism according to which they will operate.

“*What about the patent budget? Rosenta will be paying all the patent costs and will not be able to monitor it at all*?” asked Luna.

Rolando proposed that Luna will agree with the TTO’s Patent director on a patent strategy including the territories in which such patent applications should be filed and the expected budget for such filing prosecution and maintenance.

*“These patent administration mechanisms work very well in the past rest assured that it will work perfectly also with Rosenta”* said Rolando.

1. ***Please suggest a consultation mechanism***

*“We are left with the publication issue”* said Rolando to Luna.

*“No problem, as long as both Parties approve the publications in advance I am absolutely for it*,” said Luna.

*“Luna, you have to understand that the freedom of publication is a corner stone in the researchers’ work in the University. Under University’s regulations, we are prohibited from preventing any researcher’s publication. We can only limit or delay such right under well- defined circumstances”* said Rolando.

*“Well, maybe this is the case in standard sponsored research when the results are solely developed by the researcher, however in this collaborative research the results are jointly developed and therefore jointly published only following both Parties’ consent. It may even be a case where Rosenta’s researchers initiate joint publications. By the way, I never said that I would like to prevent any publication”,* answered Luna.

Rolando knew that if in order to publish Prof. Goldman will need Rosenta’s prior consent, a scenario according to which Rosenta will not provide such consent may happen. He cannot agree to it.

*“The University rules apply also on joint results”* said Rolando. *“Let me suggest a publication mechanism and following your review, we can discuss it again, ok?”*

1. ***Please suggest a publication mechanism***

**Proposed Solutions**

1. ***Ownership over the results of the collaborative research***

After further thinking about it, Rolando offered Luna joint ownership in the collaborative research results with contractual agreed upon mechanism for the use of such results by the Parties. According to such mechanism, the Company will only be able to exploit such joint results pursuant to the terms of a license granted to the Company in the university’s share in such results. Upon the Company’s failure to develop or exploit the results or upon termination of the license agreement for any reason, the Company’s share in the joint results shall be assigned to the university and it will be entitled to freely commercialize them along with the existing technology to third parties.

1. ***The legal dependency between Prof. Goldman’s existing umbrella patents and the potential new patents, and their influence on other agreement terms***

A) Since Prof. Goldman’s patent portfolio is being managed as a whole by the university. Rolando couldn’t agree to Luna’s request. Managing all patents under the same roof is very important and has a lot of advantages, such as comprehensive understanding by the patent attorney of the full portfolio and the ability to make the right strategic decisions that will strengthen the entire portfolio.

B) Rolando decided that legal dependency between the two license agreements has to exist. From his past experience, once a dispute arises between two entities the entire relationship is at stake. No ‘Chinese Walls’ can be built under these circumstances. It was obvious that for both parties the more substantial agreement was the first one relating to the existing technology of Prof. Goldman. In the event of termination of this license as a result of a material breach of the Company, the university should have the right to terminate the collaborative research agreement and the rights granted therein in the results. Such provisions were inserted by Ronaldo to the collaborative research agreement.

1. ***Definition of field of use***

Rolando reminded Luna that her idea was food applications, this is the only reason he agreed to joint ownership. Only results regarding food applications should be considered jointly owned. All other results, if any, applicable to other fields should be owned solely by the university. In addition, any rights granted to the Company will be limited to the field of food applications. The Company will exclusively license to the university its rights in the joint results to any application other than food applications. That way the collaborative research results will be fully exploited in all applicable fields. Rolando agreed to compensate the company by a certain percentage of the university’s net revenues should the joint research results be commercialized to a third party in a field which is not food applications.

1. ***Research funding rights and obligations***

A) Rolando suggested the following payment schedule:

(i) 35% of the research budget, upon execution of the agreement (covering the costs of the materials and microscope along with six months’ salary for the technicians).

(ii) 45% of the budget, upon receipt of semi-annual report (covering next six month salary for the technicians).

(iii) 20% of the budget following receipt by the Company of the final report (covering his own salary).

B) Rolando suggested the following language for the late payment section: “Any payments to be made under this Agreement that are not paid on or before the date such payments are due under this Agreement shall bear interest at an annual interest, compounded monthly, equal to three percent (3%) above the London Interbank Offer Rate (LIBOR) as determined for each month on the last business day of that month, assessed from the day payment was initially dueuntil the date of payment.”

1. ***Patent administration issues***

Rolando offered the following consultation mechanism:

“The TTO shall be responsible for the preparation, filing, prosecution, protection and maintenance of all Patent Rights, using patent counsel reasonably acceptable to Rosenta. TTO shall consult with Rosenta as to the preparation, filing, prosecution, protection and maintenance of the Patent Rights reasonably prior to any deadline or action with respect to any material decision in any patent office and shall instruct the patent counsel to furnish Rosenta with copies of all relevant documents reasonably in advance of such consultation.”

1. ***Publication issues***

Rolando suggested the publication mechanism below:

A) 30 days prior to any publication or presentation of the research results by Prof. Goldman or by Rosenta’s personnel, the party who initiates the publication will submit to the other party the draft publication for its review and comments.

B) Each party will be entitled to require the deletion from the draft publication of any of confidential information of the other party. Provided that the joint research results will not be considered confidential information.

C) Each party will be entitled to delay publication for up to 60 days for the purpose of filing a patent application to protect the joint research results.

D) Prof. Goldman will add relevant Rosenta’s researchers as co-authors of publication initiated by his group, and vice versa. Prof. Goldman will grant proper credit to Rosenta as the sponsor of the research.

Hypothetical Case Study 5 – Ownership of IP

**Background Story**

Prof. Daniel Shwimer is an energetic young researcher in the field of cell biology and immunology from the Faculty of Life Sciences at Stanlort University. He runs an active laboratory with 30 graduate students, junior researchers and technicians, working under his supervision on various topics. The Lab is financially supported by multiples funding sources, including grants from the NIH (US), Horizon 2020 (EU), sponsored Research from industry and more.

Prof. Shwimer is the inventor of various patents covering different kinds of synthetic liposomes which can be used as a vehicle for targeted delivery of nutrients and pharmaceutical drugs. He is not only a meticulous researcher who never compromise on excellence and academic achievements, but also a successful entrepreneur. He is very respected and appreciated by the staff working under his supervision, which enjoy full academic freedom under his professional guidance, along with pleasant temper and a warm approach.

In August 2016, a talented Ph.D. student named Richard Rolnik from Kerberg University in Germany joined Prof. Shwimer’s Lab. This young man was highly recommended by Mr. William Roch, a prominent donor of Stanlort University who knows the Rolnik family. Mr. Rolnik has been an exceptional Ph.D. Student in Kerberg University and wanted to complete his studies in Prof. Shwimer’s laboratory by doing a limited period scientific project.

Prof. Shwimer’s research team welcomed Mr. Rolnik warmly and shared with him openly their professional and personal experience.

*“I discovered Mr. Rolnik to be an excellent student, hard worker and exceptional in his thinking”* said Prof. Shwimer to his colleagues.

Based on his experience in nanotechnology, Mr. Rolnik was assigned by Prof. Shwimer to work on polymeric nanoparticles. He was doing very well; his hard work seriousness and creativity was shown, and scientifically it appeared that he is really flourishing. He was working on this project alone, receiving occasional assistance from Prof. Shwimer’s technician, Ms. Mira Love, who is very experienced in working with nanoparticles.

*“On March, 2017, I told Mr. Rolnik that his work may have commercial applications and that if we will be able to repeat some of his experiments and prove feasibility, the next step will be to approach Stanlort Technology Transfer Office (TTO) to apply for a patent application. We never really got to that stage because of what happened later. At the same time, I was in the process of submitting another patent application on a different technology relating to exosomes. This work was submitted as a provisional patent application and a paper was at the time under review. Mr. Rolnik was not an inventor on this patent application and no data that he produced was included in it or in the manuscript. The data for this research was generated by me together with two of my team members: Dr. Nustha Padashni and Mr. David Tulin. Nustha is a graduate student whose fellowship is being financed by a French company under a sponsored research agreement and the European Commission under a Horizon 2020 project. David is a technician whose salary is funded by the European Commission under the same Horizon 2020 project. Nustha and I are co-inventors on the patent application and have been working on this study a year and a half by this time. David contributed greatly to the generation of data that led to the filing of the patent application.*

Exosomes are small intracellular membrane-based vesicles with compositions different than liposomes, which are involved in several biological and pathological processes. The exploitation of exosomes as drug delivery vehicles offers important advantages compared to other nanoparticulate drug delivery systems, such as liposomes and polymeric nanoparticles.

*“As part of his training, when Mr. Rolnik first came to my lab he was introduced to exosomes by Nustha, but he moved really fast to working on his project on polymeric nanoparticles. At some point Mr. Rolnik overheard Nustha’s conversation with the TTO about our patent application. He mistakably thought that this patent application was based also on the data which resulted from his few experiments with exosomes. Two days later, Mr. Rolnik took the laboratory notebooks from my lab and deleted all the files regarding his work from all the computers in the lab. He then demanded to see our patent application and claimed that he is also an inventor. I was less concerned of losing Mr. Rolnik’s data regarding his polymeric nanoparticles project because it was isolated “toy project”, not related to his main topic, but I was angry of him taking the notebooks and deleting the data and concerned about the damage he may cause to my exosomes project. At this point I approached the TTO for advice and assistance.”*

Dr. Miriam Ebot, the legal advisor of the University’s commercialization activities, met Prof. Shwimer and heard his story. He was very upset and agitated. She never saw him like that before.

*“Daniel, you have to calm down and tell me the story in a chronological manner. Otherwise I will not be able to gather all the facts and help you”* said Miriam.

Daniel took a deep breath and told her the story from the day he got the recommendations on Mr. Rolnik till today. Miriam took notes of questions that needed to be answered prior to coming into any conclusion. These were the questions:

**1. What is the legal status of Mr. Rolnik at Stanlort University and does it have the right to claim ownership over Mr. Rolnik’s results?**

**2. Does Mr. Rolnik have any rights in the exosomes new invention?**

**3. Does Mr. Rolnik have a right to review the patent application filed with respect to the exosomes invention?**

**4. Does Kerberg University have rights with respect to Mr. Rolnik’s IP generated at Stanlort University?**

**5. Is there any third party that may claim ownership in the exosomes invention?**

**6. Are there any third party rights in the exosomes invention?**

Miriam asked Daniel what is the legal status of Mr. Rolnik at Stanlort University. He did not know.

*“I sent Mr. Rolnik on his first day at Stanlort University to the Students Secretary, who handles all paperwork regarding visiting scientists and students; there are some insurance and other documents that should be settled with the university. I remember clearly that Mr. Rolnik refused to be financially supported for his work in my lab. Maybe the reason was that he did not want to sign anything,”* said Daniel.

Miriam then approached the Students Secretary and asked for the forms that Mr. Rolnik signed. She found out that Mr. Rolnik eventually did not sign the insurance forms as requested. She also found out that visiting scientists like Mr. Rolnik are requested to fill and sign only an insurance form. Therefore, no forms regarding IP issues existed. She took a note to discuss this issue with the University’s management. She had no doubt that IP forms should be implemented. She then approached the university’s Research Authority and found that there was no record of Mr. Rolnik who was simply not in the university’s data base.

*“So he was not employed by the university nor was considered a university’s student. He was actually a visitor at the University. With respect to the laboratory notebooks, it is clear that they are the university’s property but this is not really the issue here. The IP described in the notebooks is the asset that really matters. Since Mr. Rolnik did not sign any IP form, is there still any legal ground to claim that IP created by him in Daniel’s laboratory is the university’s property?”* asked herself Miriam.

1. ***Where would you be looking in order to check the legal ground for such claim?***

*“Does Mr. Rolnik have any rights in the exosomes new invention?”* Miriam asked herself. According to Daniel’s version Mr. Rolnik had nothing to do with the new exosomes invention. *“Let’s assume for a minute that he did contribute to this invention, in such case, what rights would he have? Since he did not sign any IP waiver and may claim that the university’s IP regulations do not apply on him because he never agreed to them in any manner, it is possible that such invention will be considered a joint invention, owned jointly by Mr. Rolnik and the university. This is a very problematic situation that should be heavily considered by the university since it may lower the chances that the university will decide to protect the invention and also the chances for successful commercialization”* thought Miriam.

1. ***Why do you think universities may have different considerations with respect to joint inventions as opposed to sole inventions?***

Mr. Rolnik insisted on reviewing the exosomes patent application. Daniel firmly objected that.

*“Does he have the right to review it? From my point of view, he is just “a man from the street” fishing for other people’s confidential information. After he stole the laboratory notebooks, I am not sure at all what will he do with my invention!”* said Daniel.

Miriam agreed with Daniel that legally Mr. Rolnik did not have any right to review the invention; however, she had other considerations in mind and recommended Daniel that they will consider a process that will allow them to clarify whether or not Mr. Rolnik has any contribution to the invention.

***3. (a)******What do you think were Miriam’s considerations?***

[Please discuss question 3(a) and go over the remarks prior to discussing section 3(b) below.]

***3. (b)******Please suggests an appropriate process for finding out whether Mr. Rolnik is an inventor on the invention, without disclosing the invention to him***

Then, Miriam has turned to the fact that Mr. Rolnik is a Ph.D. Student in Kerberg University in Germany. She talked with Daniel who told her that Mr. Rolnik is also employed by Kerberg University as a teaching assistance.

*“If eventually we will find out that Mr. Rolnik has inventive contribution to the exosomes invention, could it be that the exosomes invention will be jointly owned with Kerberg University and not Mr. Rolnik? Maybe we should discuss the ownership issue with Kerberg University and not Mr. Rolnik at all?”* thought Miriam.

1. ***What do you think? And how would you find out?***

The exosomes invention was a result of two research projects that involved several persons and two different sources of funding.

The persons that were involved were (1) Prof. Daniel Shwimer, (2) Dr. Nustha Padashni and (3) Mr. David Tulin.

Dr. Nustha Padashni is a graduate student who did a fellowship at Stanlort University in parallel to her part time job at Juno Biology Inc., a company that developed and sold different kind of liposomes (which operate in a manner similar to exosomes). In her employment contract with Juno, Dr. Padashni agreed that any IP resulted from her work in Juno will be the sole property of Juno.

Dr. Nustha Padashni research activities at Stanlort University were funded by a French company called Luviel SE and by the European Commission within the framework of a Horizon 2020 project.

Mr. David Tulin, a technician, was hired by Stanlort University for this project and also gave services to other organizations and was involved in various research projects. His work for the exosomes project was funded by the European Commission within the framework of the same Horizon 2020 project.

1. ***Please discuss the ownership claims that may be raised by the above mentioned parties. How would you check if such parties have any ownership rights in the invention?***

Luckily, Juno has waived any claims with respect to any results emanated by Nustha in the exosomes project, and according to David’s contract, the data generated by him in the framework of the exosomes project was the property of the university. So except for Mr. Rolnik’s claims it seemed that all ownership rights were settled. Now Miriam was wondering if there were any **contractual rights** of third parties with respect to the exosomes invention.

The purpose of the Horizon 2020 project was to develop a drug for breast cancer by using exosomes. According to the consortium agreement executed between all participants of the Horizon 2020 project, each participant has royalty-free access rights to use the other parties’ “Foreground” (the results that each participant in the project achieves) and “Background” (IP that is relevant to the projects and owned by each participant prior to the project). The royalty-free right is granted solely for the performance of the research activities under the program. If a participant needs to use other party’s Foreground or Background for the purpose of commercially using his own Foreground, he has the right to do so under fair and reasonable conditions to be agreed between him and the owner of such Background or Foreground.

Luviel is focusing on developing a therapy for Chagas disease (a tropical parasitic disease) and funded the research for the purpose of studying the potential contribution of exosomes to such therapy. According to the Sponsored Research Agreement executed between Stanlort University and Luviel, the company has a right of first opportunity to review the results of the sponsored research and decide whether it wishes to obtain a license.

On a first glance, it seemed to Miriam that the contractual rights granted to the Horizon 2020 project participants and Luviel are overlapping.

1. ***Please discuss whether indeed there is an overlap of rights***

**Remarks**

The purpose of this case study is to present the complexity of the IP ownership issue, and the importance of coherent policy with appropriate legal backup. Acknowledging it will allow universities to regulate appropriate routine procedures and implement them in their day to day activities. However, unforeseen situations require human common sense for solving practical disputes.

1. ***The legal status of Mr. Rolnik at Stanlort University and University’s right to claim ownership over Mr. Rolnik’s IP***

Indeed Mr. Rolnik did not sign any waiver with respect to IP rights in the Student Secretary or other Stanlort University office; however Stanlort University IP Regulations are phrased in a way that they apply also on visiting scientists. According to these regulations, the ownership of any IP created by a visiting scientist while using the university’s resources, vests solely in the university. No doubt that Mr. Rolnik used the university’s equipment, computers, materials and the supervision of university personnel, thus the IP developed by him is considered university IP from the university point of view. However, one can question the strength of the claim that university regulations oblige third parties without their formal consent. Mr. Rolnik can claim that he never gave his consent to the university’s regulations; he was not paid by the university and did not sign any university forms.

1. ***Ownership rights of Mr. Rolnik in the exosomes new invention***

In the event that Mr. Rolnik will prove his inventive contribution to the exosomes invention, he will be declared as an inventor, and since no assignment forms were executed between him and Stanlort University, the invention may be jointly owned by him and the university.

In general, any joint ownership has its own complications. Merely the need for reaching understanding with another party of what should be done with the joint asset, has its own transaction costs and involves management time and efforts. In many cases, it can decrease the profitability of the expected return.

Joint ownership of a university with an individual has even more disadvantages. The individual usually does not have a deep enough pocket to share the patent expenses with the university. He/she is not familiar with the protection and commercialization process and thus many questions and disputes may arise. Commercial entities are reluctant from commercializing inventions that are jointly owned since it makes the negotiation and licensing process much more complex, especially if the other owner is an individual and not an institute. Furthermore, if joint owners of an invention do not reach an agreement with respect to the commercialization of the invention, it will not be possible to license the invention on an exclusive basis to a third party. In some territories it will even not be possible to license the invention on a non-exclusive basis to a third party without the consent of all joint owners.

1. ***Mr. Rolnik’s right to review the patent application***

**(a)** Miriam knew that in any future commercialization of the exosomes invention, as part of the TTO’s conduct of negotiating in good faith with any potential licensee, the TTO will have to disclose Mr. Rolnik’s inventorship claims. This may create uncertainty with respect to the ownership of the invention, and any potential licensee would probably require receiving a waiver from Mr. Rolnik with respect to such claims, or alternatively receiving legal opinion from a patent attorney that Mr. Rolnik is not an inventor on the invention. In addition, if by any chance Mr. Rolnik is indeed an inventor of the invention, he may invalidate the patent on the basis of incorrect inventorship. This is too big of a risk to take.

**(b)** Miriam suggested a process according to which Mr. Rolnik will feel that his claims are being heard and addressed seriously on one hand, and no confidential information will be disclosed to him on the other hand. According to such process, both the university and Mr. Rolnik will agree on a reputable patent attorney who will review the exosomes patent application. The patent attorney will meet Mr. Rolnik in order to consider his inventorship claims. Mr. Rolnik will have to provide written evidence to support his claims including the laboratory notebooks. The patent attorney will then decide whether Mr. Rolnik is an inventor or not. His/her decision will be acceptable to both parties.

1. ***Ownership rights of Kerberg University with respect to Mr. Rolnik’s IP generated at Stanlort University***

Miriam understood that in order to find out whether Kerberg University is the potentially joint owner, she should look into Kerberg University regulations and check if according to them, IP that is developed by a Ph.D student while visiting other institutions belongs to Kerberg University.

*“If that is the case,” Miriam thoughts, “Kerberg University will be our partner to any discussions and negotiations, and not Mr. Rolnik. It could make things easier to have an academic institution as our joint owner and not an individual.”*

Apparently, according to Kerberg University’s rules, the university does not claim ownership on IP developed by its students, only to IP developed by university employees that are engaged as researchers. Mr. Rolnik was employed as a teaching assistant and not in a position of a researcher thus this rule doesn’t apply on him.

1. ***Ownership rights with respect to the exosomes research project***

A) Prof. Daniel Shwimer is a Faculty Member at Stanlort University and therefore is obliged by its IP regulations. According to the university’s IP regulations, the university is the owner of all inventions developed by its faculty members, including Prof. Shwimer’s contribution in the exosomes invention.

B) Dr. Nustha Padashni is doing her fellowship at Stanlort University and therefore is obliged by its IP regulations. According to the university’s IP regulations, inventions developed by researchers while using university resources (funding, facilities, equipment and supervision of university’s personnel) are the property of the university including Dr. Padashni’s contribution in the exosomes invention.

C) Mr. David Tulin has been hired by Stanlort University for performing certain research activities in the exosomes project. In his engagement agreement the university included a provision according to which all the data and results that he will generate during his work at the university will be the sole property of the university.

D) Juno Biology Inc., the employer of Dr. Padashni, may raise ownership claims with respect to her contribution to the exosomes invention on the ground that such contribution was made as a result of her work in the company. According to her employment contract, all IP developed by her as a result of her work in the company is the property of the company. The field of her scientific research at the university and the field of her R&D at the company are close and thus such claims are realistic. In order to avoid such claims, the university should ask Juno, prior to engaging Dr. Padashni in the exosomes project, to provide a waiver stating that Juno acknowledges the participation of Dr. Padashni in the exosomes project in the university and agrees not to claim ownership rights with respect to her results.

E) Luviel SE executed a sponsored research agreement with Stanlort University. According to the terms of the agreement, the results of the sponsored research are owned by the university. In consideration for sponsoring the research, the company is receiving the right of first opportunity to obtain a license in the results of the sponsored research.

F) According to the IP rules of the Horizon 2020 projects, each participant is the owner of the IP developed by it. Thus, Stanlort University is the owner of the results emanated by Prof. Shwimer and his team within the Horizon 2020 project.

1. ***Commercial rights of third parties who sponsored the exosomes research?***

The Horizon 2020 project was in the specific field of drug development for breath cancer. Therefore, all rights in the Foreground and Background of the participants are limited only to this field.

The right of first opportunity granted to Luviel was in a different field: developing a therapy for Chagas disease.

The contractual rights of the above mentioned parties are limited to a specific defined field. Therefore there is no overlap between the granted rights.

1. The Toolkit provides a one-stop-shop for academic and research institutions that seek guidance in the course of shaping and implementing their institutional IP policies. A copy can be found on the [WIPO website](http://www.wipo.int/policy/en/university_ip_policies). [↑](#footnote-ref-1)