# The University of Akron

# IdeaExchange@UAkron

Williams Honors College, Honors Research Projects The Dr. Gary B. and Pamela S. Williams Honors College

Spring 2023

# Standard Licensing Template for University of Akron Startups

Drew Horton dwh51@uakron.edu

Follow this and additional works at: https://ideaexchange.uakron.edu/honors\_research\_projects

Part of the Commercial Law Commons, Contracts Commons, Entrepreneurial and Small Business Operations Commons, and the Intellectual Property Law Commons

Please take a moment to share how this work helps you through this survey. Your feedback will be important as we plan further development of our repository.

#### **Recommended Citation**

Horton, Drew, "Standard Licensing Template for University of Akron Startups" (2023). *Williams Honors College, Honors Research Projects*. 1667.

https://ideaexchange.uakron.edu/honors\_research\_projects/1667

This Dissertation/Thesis is brought to you for free and open access by The Dr. Gary B. and Pamela S. Williams Honors College at IdeaExchange@UAkron, the institutional repository of The University of Akron in Akron, Ohio, USA. It has been accepted for inclusion in Williams Honors College, Honors Research Projects by an authorized administrator of IdeaExchange@UAkron. For more information, please contact mjon@uakron.edu, uapress@uakron.edu.

# Standard Licensing Template for University of Akron Startups, CHEE 497-001

To the Readers and Department Chair

April 21, 2023

**Drew Horton** 

#### **Executive Summary**

#### Background and Purpose

Universities often increase the use and the impact of their technologies through technology transfer. In technology transfer, the university is giving the right to commercialize intellectual property (IP) to a third-party company. The University of Akron is looking to improve its technology transfer and thus its impact by improving the way in which it licenses technology to startup companies. The aim of the project is to create an express license, a license which is preformulated and is expected to be signed with little or no negotiation. The goal of such a license is multifaceted: it seeks to reduce the burden of negotiation on the startup, to provide terms conducive to startup success, and to improve the relationship between the university and the startup. The express license does this by reducing the legal hours required to negotiate the license, providing excellent terms to all startups, and ensuring transparency and fairness. To work towards this goal, this project sought to identify industry best practices, benchmark current licensing terms, gather the view of involved parties, and draft an express license based on the results.

## Result of data

During the data collection for this project, a number of interviews listed in the works cited were conducted in order to determine best practices. From these interviews it was decided to shift toward antidilution, tiered sublicensing, future rights with faculty consent, and a three-option express license which are discussed in the main body of the report. The other major source of data was TransACT and other online resources as outlined in the works cited. From these, a total of 57 different aspects were quantified for each license. All of these are included in the attached excel sheet. However, even a table summary of the data is far too large to fit in this section. However, the most relevant data points may be summarized in a smaller table, Table 1.

**Table 1**. The summary of the most important terms used to develop the recommended license

Term	Express	TransACT
Upfront payment (for licenses that included)	\$ -	\$20,500
Mean royalty	2%	3.31%
Mean equity	5%	6.73%
Rate of including antidilution (of disclosed)	83%	78%
Sublicense tiered Mean initial	24%	40%
Sublicense tiered Mean final	16%	18%
Mean MAR/Maintenance year 1	\$ 9,170	\$ 14,000
Mean MAR/Maintenance year 2	\$ 10,800	\$ 24,600
Mean MAR/Maintenance year 3	\$ 12,500.00	\$ 38,100
Mean MAR/Maintenance year 4	\$ 16,700	\$ 26,000
Mean MAR/Maintenance year 5	\$ 20,000	\$ 39,100

# Conclusions

**Table 2.** The suggested economic terms for the three-option express license

Term		Mixed	E	quity forward	Ro	oyalty forward
Upfront fee:		\$ -	\$	-	\$	-
Royalty:		2%		0.5%		3%
equity:		5%		10%		2%
antidilution		\$3M		\$5M		\$1.5M
Sublicensing initial:		35%		20%		45%
Sublicensing final:		20%		10%		30%
Minimum annual roya	lty:					
year 1-3		\$ -	\$	-	\$	-
	4	\$5,000.00	\$	5,000.00	\$	5,000.00
	5	\$ 10,000.00	\$	10,000.00	\$	10,000.00
	6	\$ 20,000.00	\$	20,000.00	\$	20,000.00
	7+	\$ 40,000.00	\$	40,000.00	\$	40,000.00

The terms above summarize the license created through this project. Each term was devised based upon the data collected from the available TransACT and express licenses as well as the best practice as determined through research and interviews.

#### **Broader** implications

The work performed in this project has been quite beneficial for my own growth, and I believe it will be beneficial for dozens of startup companies in the future. Personally, it has given me greater experience in reading, analyzing, and understanding legal documents, an important skill as I seek to pursue patent law. It was also some of my first real exposure to intellectual property law and has solidified my desire to study it. Furthermore, it allowed me the opportunity to talk to and connect with people across the country. The legal world is surprisingly small, so one day these connections may prove useful for my career. Thus, the project has been useful to me from a career and personal growth perspective.

I also believe that this project will have real world benefits. This project and express licenses were not created as a thought experiment. The licenses are expected to be used and adapted for real world applications. As such, their design and use will significantly impact the future of the University of Akron's technology transfer and the dozens of startups that will be formed under the licenses in the future. It was the goal of the project to lead to overall better outcomes for both the startups and the university by addressing the issues outlined in the introduction. So, in total, the project has been and will be helpful to the University of Akron and me.

#### Recommendations for future work

Based upon the experience of the project, several recommendations for future work can be made. I would recommend showing and discussing the provided licenses with all participants who frequently work with The University of Akron for its university startups. Meetings should be held with frequent entrepreneurs, legal firms that often represent startups, and investors that frequently fund the startups to garner community buy-in. The second recommendation is to refine the license based on experience. Over the next several years, quantitative and qualitative data regarding the effectiveness of the license should be collected. This should then be used to adjust the terms of the license as needed.

#### Introduction

As the University of Akron looks to increase its impact, a clear avenue of expansion is through increased licensing of university intellectual property (IP). Of particular importance is licensing to startups formed by university staff and students. These startups, often called spin-offs or spin-outs, can be both a source of revenue for the university through licensing fees, royalties, and equity, as well as a means of producing positive impacts on the community and economy. One of the most important aspects of creating a spin-off is the licensing agreement. Having exclusive access to intellectual property from a university is the spin-off's primary source of value, how it attracts investors, and is usually the groundwork for the product or service the spin-off supplies. Negotiating a license, however, can be a long, expensive, and confusing process. The founders of spin-offs are usually academics with limited entrepreneurial experience or skills. Negotiations can last months and consume valuable capital that the startup needs to be successful. It can leave founders distrustful or dissatisfied with the university as they often feel that they have been taken advantage of in the negotiation process.

This project seeks to rectify many of these issues by establishing a standard contract, or a few standard contracts, that may be applied to every startup without negotiation. The idea being that by skipping the negotiation process and giving every spin-off the same good deal, the university and the spin-offs will be able to save time, save money, and save relationships.

## **Background**

In order to understand university technology transfer and the licenses involved, several terms must be understood. To start, for the scope of this project, a university startup, sometimes called a spin-off or a spin-out, is a startup company formed in order to utilize intellectual property (IP) created by universities. These companies are often founded by professors or graduate students who have research that may be commercialized. These startups are, however, not directly connected to the university other than

through the licensing agreement for the IP. Another important point to consider when understanding technology transfer is that Universities not only want to license their IP to increase their impact and generate revenue, but also because they have a legal obligation to do so. The Bayh-Dole Act, passed in 1980, made important changes to how IP created with Federal funding was handled. Previously, thirdparty organizations did not always have the right to commercialize their inventions if these inventions were created with Federal funds. This was particularly important to universities, who often receive a large amount of Federal grant money in order to conduct research. With the advent of the Bayh-Dole Act, organizations such as universities were able to retain the rights to IP developed with Federal funding as long as they met certain provisions. The most important provision for this discussion is that the university must attempt to commercialize the invention, else the government may use "march-inrights" to seize control of the IP. One of the most effective ways for a university to meet this obligation is to license the technology to a third-party company, established or startup (Drexel Bayh-Dole act). As such, nearly every research university in the United States makes use of a technology transfer office. This office manages the licensing of university IP to companies in order to pursue commercialization. For the University of Akron, the technology transfer office works through the University of Akron Research Foundation (UARF) which is the official licensing arm of the University of Akron. With this understanding of technology transfer, the terms that go into the licenses may be better understood.

There are dozens of terms that may be included in a startup license. For the purposes of this project, they can be split into two main areas, negotiable and nonnegotiable. Negotiable terms are those terms which traditionally may be altered from license to license. Nonnegotiable terms are those terms that remain constant between all licenses. Nonnegotiable terms may be nonnegotiable due to either university policy (e.g., a university may never include future improvements) or as legal requirement (e.g. the license must contain government "march-in-rights" to be compliant with the Bayh-Dole act). To create an express license, all the terms must be rendered nonnegotiable or close to it. Given the

inflexibility of this approach, it is important that the terms which are preformulated to be acceptable to both the university and the vast majority of startups. Some flexibility may also be returned by creating a small set of express licenses, this way startups can choose the set of terms they believe are most conducive to their success without compromising the benefits of having an express license system (Horton and Rees *Colorado Boulder Interview*). As such, the formulation of three separate licenses was the approach taken in this project. Before discussing data collection and analyzing results, it is important to define some of the more important negotiable and nonnegotiable terms.

The negotiable terms encompass much of the revenue collection of the license. They include royalties, equity, minimum royalties, milestone payments, payment of patent costs, and sublicence considerations. All these financial terms as well as future improvement clauses should be understood. The first negotiable term to consider is royalties. Royalties are a fee collected by the licensor from the licensee based on net sales of the licensee (Leute Anatomy of a license agreement - AUTM). So, if a license calls for a 3% royalty on net sales, then the licensee pays a dollar amount equivalent to 3 cents per dollar of net sales. The legally exact definition of net sales is complicated and can be found in the attached licenses. Minimum royalties are a connected term. These royalties specify a lower bound for how much the licensee must pay in royalties for a given year (Leute Anatomy of a license agreement -AUTM). How much is due each year is specified in the license. For example, a license may say that in year 3 the minimum royalty is \$10,000. If the licensee would only have to pay \$9,000 based on nets sales, they instead have to pay the full \$10,000. If they had to pay more than \$10,000 based on net sales, they pay that higher amount. This is all important as royalties are generally one of the main forms of revenue that a university collects from university startups, the other one being equity. Equity is a percent ownership of a company and is expressed through shares in a company (Fernando Equity for shareholders: How it works and how to calculate it). This provides value to the university because if the startup succeeds and becomes valuable, then the shares owned by the university may be sold for

revenue. One important factor for equity is whether it has anti-dilution protection. As more shares of a company are issued, the previously outstanding shares may lose their equity value. Anti-dilution protections are often used to ensure that the amount of equity that the university holds does not shrink. There is an upper limit on this anti-dilution, usually defined by how much the startup has raised in qualified financing (Kenton Anti-dilution provision: Definition, how it works, types, formula). The exact legal definition may be found in the accompanying licenses. Besides these main forms of revenue, the university also derives value from milestone payments, payment of patent costs, and sublicensing considerations. Milestone payments are usually a dollar payment to the licensor when the licensee accomplishes a milestone. What defines a milestone varies with industry but it may include events such as the first commercial sale or passing an FDA trial(AUTM In the Public Interest: Nine points to consider in licensing ... - AUTM). Payment of patent costs is less about the university making money, but rather about recouping costs. Patent costs are those associated with maintaining a patent, and the university has often paid several years' worth of cost before a technology is licensed. It is often expected that the licensee will pay at least a portion of past patent expenses as well as all patent expenses in the years to come, the exact expectations vary by license. Sublicence considerations are the means by which the university can collect revenue in the event that the licensee in turn licenses technology to another company. Often the university has no other way to collect revenue from the sublicensee sales, thus making sublicence considerations an important protection for the university's revenue. The final negotiable term to discuss is whether a future improvement clause is included. Future improvements clauses vary widely. In general, when an improvement is made to the licensed technology by university research, a future improvement clause either directly adds this improvement to the licensed technology or gives the startup the first chance to license the new technology. Future improvement clauses can be contentious as researchers may feel locked to a company by such a clause. Researchers may be reluctant to join a project if the results will be handed off directly to a company they have no connection with (AUTM *In the Public Interest: Nine points to consider in licensing ... - AUTM*). As such, these clauses usually contain several protections for researchers. All of these terms are generally points of debate when a license is being created. As such, refining these points for an express license was the main goal of the project. Before moving onto the data though, the terms that cannot be changed should also be understood.

There are a few terms that cannot be changed but should still be discussed before continuing. One major point is the academic use clause. This clause reserves the right of the university to continue to use licensed technology in its own research. Such a clause is critical to the university's mission and thus cannot be removed (AUTM *In the Public Interest: Nine points to consider in licensing ... - AUTM*). Other terms are also included for the protection of the university. These terms include indemnity which keeps the university from being at fault for injuries and deaths that may occur, no warranty clauses which protects it from suits, and various definitions of terms. The various definitions in the license such as net set, sublicence revenue, etc., are nonnegotiable as they are structured very precisely to fit the license and protect the university. Besides those meant to protect the university, other terms are included as legally required, such as the march-in rights and those that deal with legal disputes such as jurisdiction and arbitration. With this background out of the way, the methodology of the project may be discussed.

#### Methodology

The main method employed to create the new express licenses was benchmarking. To create a license with the broadest applicability possible, universities, online resources, and venture capitalists were all consulted. The goal with these interactions was multifaceted. At a base level, it was desired to find what terms were common in university startups. If national averages of various terms such as equity taken, royalty rates, and so on, were known, then the express license could be designed around these averages. On a higher level, it was desired to learn best practices in the industry and why terms are what

they are. It was also desired to gain insight into what mattered to universities versus what mattered to entrepreneurs versus what mattered to investors. As the method for collecting data varied by group, each will be discussed individually.

Interviewing Universities was one of the primary means by which data was collected for benchmarking. The universities of interest were gathered by several means. Initially, they were found by researching what universities had the highest rate of startup formation (Taylor *The top 10 universities in startup* creation). The logic to this was that these universities would have the most experience with the licensing process and thus would have a plethora of knowledge to share. As the project progressed more universities were found based on recommendations from other universities (Horton and Rees Colorado Boulder Interview) (Horton and Portillo Arizona Interview) (Horton and Chitambar Illinois Interview) (Horton and Pilz Michigan Interview) (Horton and Mejia Stanford Interview). These recommendations helped to identify universities which already have express licenses and could thus provide very meaningful feedback. Over a dozen universities were emailed to see if they would be willing to have a meeting to discuss their licensing and to assist with the project. Of these universities, the large majority replied. Many of them simply offered online recourses discussed later. However, 5 of them were willing to have an interview: Arizona, Colorado Boulder, Illinois, Michigan, and Stanford. Almost all the universities reached out to did provide some useful information. However, most of them can be grouped into the online resources category and will be discussed in their own section. First, the information gained from the interviews will be discussed.

Arizona reaffirmed much of the information found from online resources and other universities. They emphasized that having no upfront fee helped to entice entrepreneurs by not putting up an additional barrier to licensing. They also emphasized that after benchmarking, the university should aim for the low end of the midpoint in order to create a more enticing license. Other questions asked of them detailed more controversial aspects. They supported the inclusion of antidilution protections for equity based on

benchmarking. They also supported the Association of University Technology Managers' (AUTM) suggested best practice of not including future improvements. Arizona also stated the importance of community buy-in on making an express license. They suggested working with common investors and local attorneys to both refine terms and to make sure they knew how the express license would work. Finally, they advised using a tiered system of sublicense considerations, in which the sublicense consideration would decrease as the startup passes milestones (Horton and Portillo *Arizona Interview*).

The University of Colorado Boulder offered both interesting advice and an interesting opportunity. Boulder introduced the concept of multiple express licenses. Boulder's own express license, Licensing with EASE, has three different options which each have their own balance of equity and royalties. They gave similar advice as Arizona in that surrounding investors should be consulted and informed on the license. They also utilize an annual fee rather than a minimum royalty. This means that they collect a certain amount of money each year which is separate from the royalties and from which royalties are not deducted. Boulder was unique in that they disagreed with AUTM on the no future improvements clause. They include 3 years of improvement subject to several constraints such as the consent of all the researchers involved. They also provide a unique term in the form of a pivot clause. This clause allows the startup to pivot away from the IP within the first year without giving up the equity which is taken when the license is signed. Boulder also supported the inclusion of antidilution protection. From their experience, national investors accept 1-5 million dollars in antidilution. These terms were all very helpful to learn and this was perhaps the single most helpful interview. They also have provided UARF with the opportunity to license the licensing with EASE system for free as long as all of the terms in the express license are kept the same (Horton and Rees Colorado Boulder Interview). This offers its own solution to the project and should be considered along with the licenses proposed in this project.

The meeting with Illinois was unique in that UARF was present at the meeting and could thus help with the interview. Illinois has their own express license for eligible applicants which made them a high

priority to interview. They implemented a sector specific approach whereby the express license for healthcare, software, and physical science were separated. Though an interesting approach, university startups through the University of Akron are normally physical science and engineering startups, so a sector specific approach was not taken in this project. Illinois also weighed in on some debated areas. Illinois agreed with the idea of having sublicence considerations reduce as milestones were reached. They also try to avoid future improvement clauses. One unique characteristic is that they are flexible on whether their equity came with antidilution protection. In their system, if a startup chooses to have the equity lack this protection, then a higher equity is taken (the larger equity helping to offset the dilution). Besides helping with the terms, Illinois weighed in on how to account for surrounding support systems. Similar to Akron, Illinois has several programs surrounding the technology transfer office which help to prepare entrepreneurs to manage their startup. Illinois' advice was twofold. They first advised that everyone forming a university startup is made to go through the training, even if they are experienced entrepreneurs. Their second piece of advice was to not use more aggressive terms because of the support. Many universities with surrounding support systems for their startups ask for more aggressive terms; the thought being that the startups should accept the terms as a form of payment for the university support. Illinois argued that this should not be done. They feel that the value in the programs is to reduce risk and help the startup to succeed. Anything that discourages the use of these support programs should be avoided (Horton and Chitambar Illinois Interview). Thus, Illinois helped with both the terms and the surrounding philosophy for the license.

Michigan was notably helpful for how they advised negotiations to be handled. One of the most common worries that universities have with express licenses is that startups will insist on negotiating. Other universities, like Colorado Boulder, publish very clearly that the terms in the express license are the best that the startup will receive (Horton and Rees *Colorado Boulder Interview*). Michigan advised allowing the startup to have one item reduced in their favor, such as allowing the startup to choose a

slightly lower equity or royalty than advertised in the standard terms. They feel this allows a more flexible model and usually satisfies the startup. They also have an interesting approach to antidilution protection. Instead of taking equity immediately, they wait until the first investment round to receive their equity, thus bypassing the dilution which would occur in the first round. Finally, they only allow future improvement clauses if the faculty member consents (Horton and Pilz *Michigan Interview*). This information proved useful in the design of the license.

The final university interview to discuss was with Stanford. Stanford introduced us to a clause which states that if the Licensee sues Stanford, then the licensee must pay several years of minimum annual royalties. They also advised that the royalty rate be kept low as physical science startups often require multiple pieces of IP which each have their own associated royalty. Other than that, they advised speaking with other universities of similar size (Horton and Mejia *Stanford Interview*). Stanford, along with all the other Universities, was a valuable resource. In addition, data collected from online resources helped to narrow down terms.

Online resources played a critical role in the benchmarking process, especially in determining exact figures for licensing terms. Online resources were used from the very beginning of the project. In the early stages of the project the websites of various universities were combed for standard licensing templates which could be reviewed (*Hardware, device, and materials startups - um - innovation partnerships*) (*Carolina Express License Agreement User Guide - Office of Technology ...*) (Herskowitz et al. *Toolkits*) (*Yale Ventures at Yale University: Innovation and Entrepreneurship*) (1819 Innovation *Express license vs option*) (CoMotion *Husky fast start*). The data collected from each online license varied based on the level of detail provided. However, all licenses found to be useful were stored for later analysis. Their economic terms and any interesting clauses were recorded in Microsoft Excel for data analysis. Perhaps the most major online resource was the TransACT database from AUTM (AUTM *TransACT*). AUTM, as the main organization for university technology transfer, has a large amount of

information surrounding what they consider to be best practice as well as numerous resources for universities. One such resource was the TransACT database. This database is a collection of real license terms for licenses between universities and companies for technology transfer. The database is sortable, and to collect data the following had to be true: the license was between the university and a startup; the license was for patent rights, tangible materials, plant variety protection, or know-how; and the license had to be for an applicable category. The applicable categories were medical devices, medical diagnostics, medical tools, any engineering or physical science invention, and any energy or environmental invention. With these criteria, 101 licenses were downloaded from TransACT and data was collected from them. The data collected represents 57 aspects of each license. Given that listing all of these as text would not be helpful, some can instead be found in summary tables in the data analysis section. The raw data is attached as an accompanying Excel file. It should be clear that the data collected from TransACT was thorough and quite important for formulating the economic terms in this project. Though the online resources made up the bulk of the raw data, discussion with investors helped to further refine the license.

It was desired to interview investors as they have a unique view on licensing. Though they are not part of the negotiations themselves, their willingness to invest in a startup can make or break the startup's success. If certain terms were unacceptable to investors or if certain terms enticed them then this would be valuable information. Unfortunately, though a variety of investment groups and entrepreneurs were reached out to, only one met for an interview. Luckily the group that was willing to meet was Osage University Partners. This group is widely considered the expert venture capital firm in terms of university startup licensing. They have agreements with dozens of the top universities across the country and frequently work with groups like AUTM. Osage provided a variety of useful advice. They advised on ensuring community buy-in. They believe that the express license should be tailored to the area and have significant support from local investors. They also advised adopting more aggressive terms. They

felt that universities were selling their IP for too little money. They also revealed that they are internally divided on express licenses, some members of Osage liked them, some were opposed. They did, however, agree that Colorado Boulder's Licensing with EASE program is a very effective express license system (Horton and Leute *Osage Interview*). This input from investors was the last piece of the puzzle for collecting data. With the data collected and best practices determined, the project moved into the data analysis phase.

#### **Data and Results**

From the collected express licenses and online resources a variety of information was found. The most important parameters, royalties and equity, are summarized in figures 1 through 6.

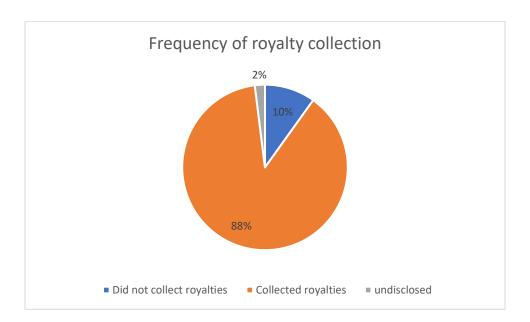


Figure 1. The figure above shows the frequency at which assorted licenses from the TransACT database collected royalties.

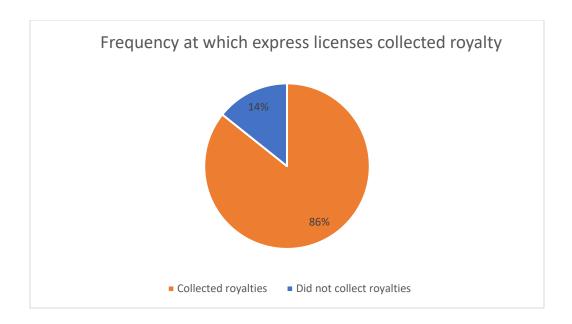


Figure 2. The figure above shows the frequency at which express licenses collected royalties.

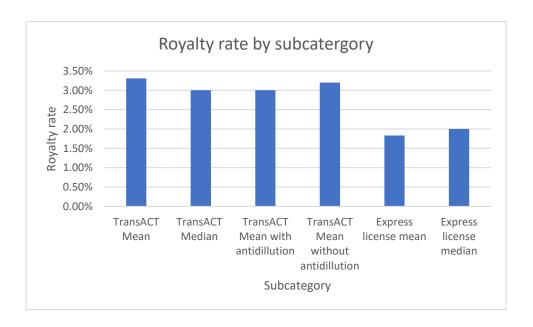


Figure 3. The figure above shows the mean and median royalty rates from assorted licenses from TransACT compared to the express licenses. Only licenses which collected a royalty were included, those that did not collect a royalty were not included.

Figures 1 through 3 summarize the royalty data from both TransACT and from express licenses found online. Royalties were clearly collected far more often than not, being collected between 80%-90% of

the time. This initial data shows that express licenses have a lower mean and median royalty rate than the licenses found on TransACT.

The equity terms are similarly summarized below in figures 4 through 6.

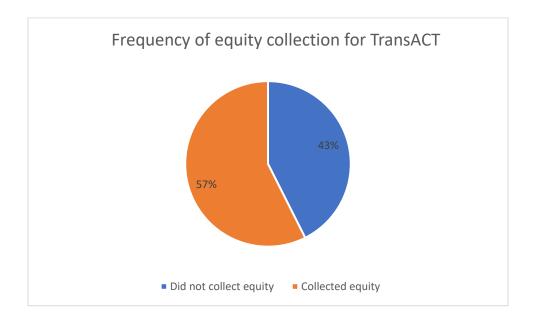


Figure 4. The figure above shows the frequency at which assorted licenses from the TransACT database collected equity.

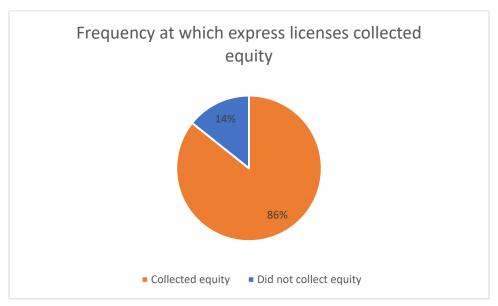


Figure 5. The figure above shows the frequency at which express licenses collected equity.

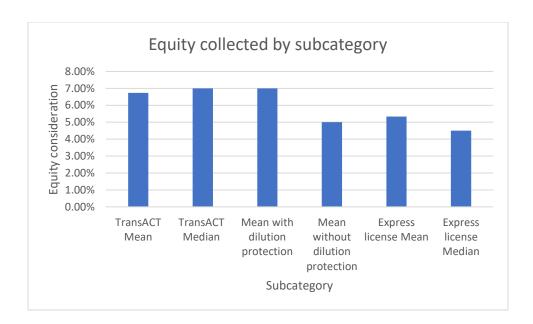


Figure 6. The figure above shows the mean and median equity received for assorted licenses from the TransACT database compared to the mean and median equity received for express licenses. Only licenses which collected equity were included, those that did not receive equity were not included. One outlier of 80% equity was removed from the TransACT data.

This initial data shows that express licenses have a lower mean and median equity than the licenses found on TransACT.

Another factor which this project sought to optimize was the sublicensing consideration. Currently, licenses from Akron have a large consideration of 50%. The market norms are summarized in figures 7 through 8 below.

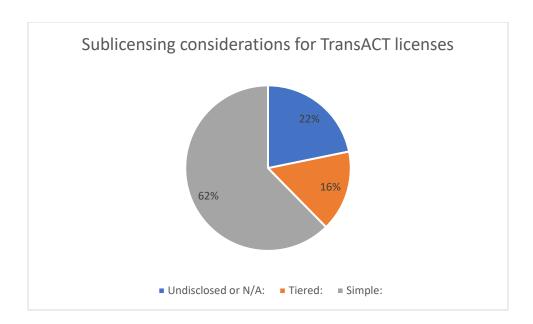


Figure 7. The figure above shows types of considerations found in the TransACT database. Simple means that the sublicensing consideration was constant. Tiered means that the sublicensing consideration is variable, often changing with time or number of milestones completed. Undisclosed means that sublicensing was allowed but the consideration was not disclosed, this is grouped with N/A which means that the right to sublicense was not granted.

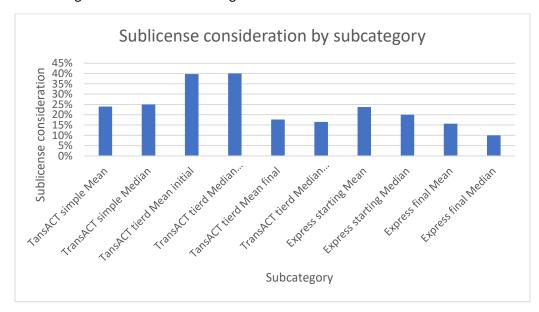


Figure 8. The figure above shows the mean and median sublicense considerations for a variety of cases. Undisclosed and N/A values were not taken into account. Those that disclosed a sublicense consideration of 0% were taken into account.

This sublicensing data will be discussed further in the results and conclusions section. From an initial

look however, it seems that the express licenses again offered more favorable terms than the licenses

found in TransACT. Given that sublicensing is a complex topic, the slightly simpler upfront payments will be shown in figures 9 through 11.

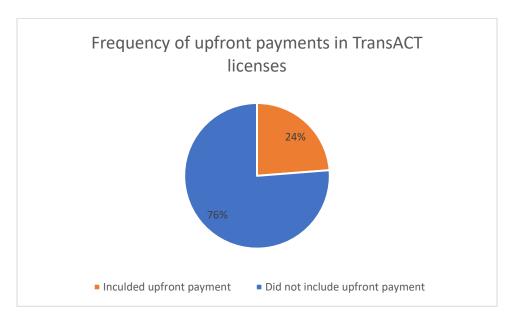


Figure 9. The figure above shows the frequency at which assorted licenses from the TransACT database collected an upfront payment.

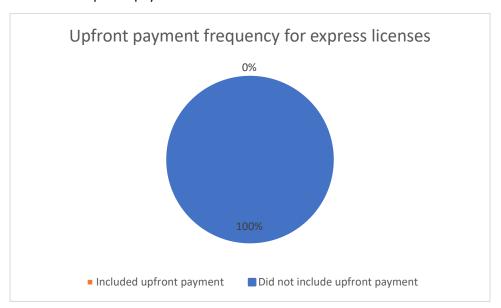


Figure 10. The figure above shows the frequency at which express licenses collected an upfront payment.

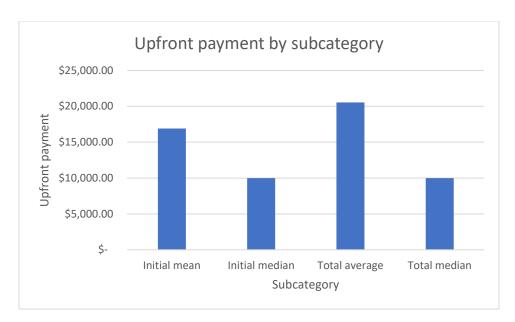


Figure 11. The figure above shows the dollar amount of upfront payments collected. The data presented is only for TransACT as none of the express licenses collected an upfront payment. The split between initial and final is because some licenses collected the upfront payment over several charges. Initial refers to those due the moment the license is signed, total refers to the initial plus any additional upfront payments.

The above data shows that upfront payments are not a popular option, especially for express licenses.

However, minimum annual royalties are a more popular option which shall be shown in figures 12 through 14 below.

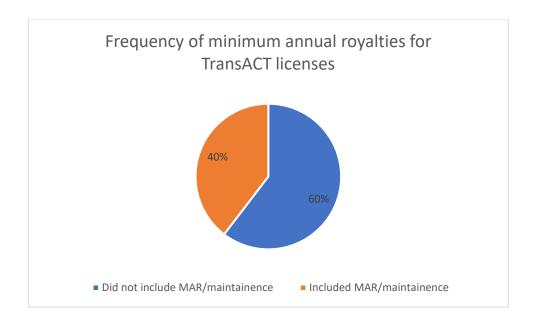


Figure 12. The figure above shows the frequency at which assorted licenses from the TransACT database collected a minimum annual royalty.

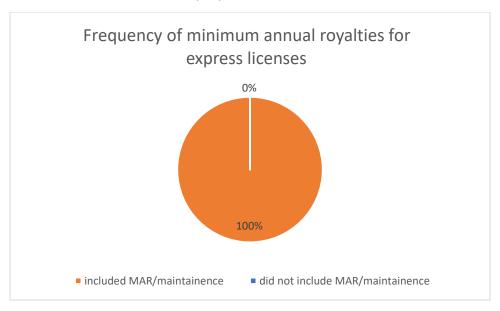


Figure 13. The figure above shows the frequency at which express licenses collected a minimum annual royalty.

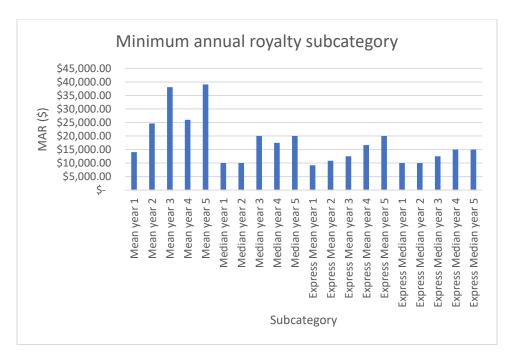


Figure 14. The figure above shows the dollar amount collected by year since the minimum annual royalty went into effect for various licenses.

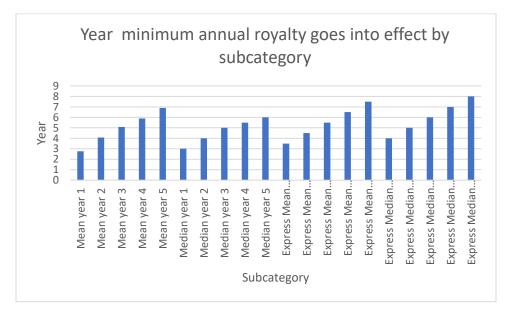


Figure 15. The figure above shows the year that each minimum annual royalty went into effect. The unit on the y-axis is years.

One term that can not be shown in the same manner is antidilution. Unlike many terms, the TransACT database does not provide exact figures for the amount of antidilution. As such, it is organized simply

into included, not included, and undisclosed for those licenses which take equity. This is shown in figures 16 through 17 below.

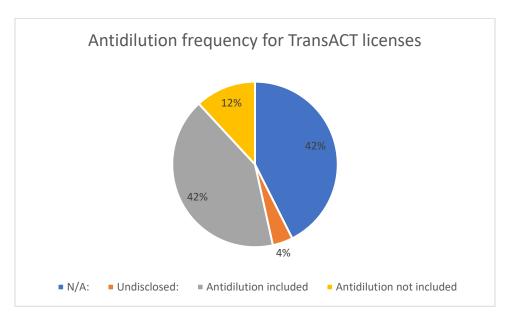


Figure 16. The figure above shows the frequency at which assorted licenses from the TransACT database included antidilution terms.

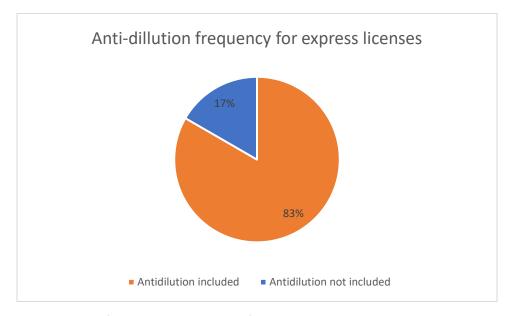


Figure 17. The figure above shows the frequency at which express licenses included antidilution terms. One was left out for not having equity, Yale had a unique system that was similar to but not quite antidilution and was thus counted as a not included.

The figures above summarize the data that will be analyzed in-depth in the results and conclusions section as these were the main terms that recommendations were made based on. As stated in the

methodology section, there were 57 types of data compiled like this. Though the rest will not be shown here for matters of space and relevance, they may be found in the accompanying Excel file. This extra data will be kept by UARF for future use.

## **Analysis and Conclusions**

The end goal of the project was the creation of a standard set of licensing terms for University of Akron technology startups. With this in mind, the term sheet in table 1 gives the suggested economic terms based upon the data collected.

Table 1. The suggested economic terms for the three-option express license

Term		Mixed	E	quity forward	Ro	yalty forward
Upfront fee:		\$ -	\$	-	\$	-
Royalty:		2%		0.5%		3%
equity:		5%		10%		2%
antidilution		\$3M		\$5M		\$1.5M
Sublicensing initial:		35%		20%		45%
Sublicensing final:		20%		10%		30%
Minimum annual roya	alty:					
year 1-3		\$ -	\$	-	\$	-
	4	\$5,000.00	\$	5,000.00	\$	5,000.00
	5	\$ 10,000.00	\$	10,000.00	\$	10,000.00
	6	\$ 20,000.00	\$	20,000.00	\$	20,000.00
	7+	\$ 40,000.00	\$	40,000.00	\$	40,000.00

Each of these recommended economic terms was outlined in the preceding data section. The threeoption form was inspired by the University of Colorado Boulder who similarly have three express
licenses to choose from (Horton and Rees *Colorado Boulder Interview*). This was selected in order to
counter one of the largest issues with an express license system, the lack of flexibility. By extending the
license to have three options that vary the equity and royalty, nearly every prospective startup should
be able to choose an option that suits them. As for the terms themselves, they were each designed first
for the mixed section and then modified to create an equity forward and a royalty forward form of the

license. Looking at **Table 1.**, the first item is the upfront payment. Figures 9 and 10 show that upfront payments are collected in the minority of startup licenses. Figure 10 is particularly compelling in that none of the express licenses collected an upfront payment. This observation meshes with what was learned in the interviews, as outlined in the methodology section. The general view of express licenses is that they should reduce the barriers to licensing and put the startup in a favorable position at launch. By not collecting thousands or tens of thousands of dollars at the signing of the license, this view is upheld. As such, the suggested terms do not collect an upfront payment. Working down the list, the second term to consider is the royalty rate. From Figures 1 and 2 it is clear that royalties are very common in startup licensing. Figure 3 shows that the mean for TransACT licenses hovers around 3% while the mean for express licenses is a little under 2%. This is not surprising as express licenses are generally formulated with better than average terms as the licensee does not have the opportunity to negotiate. Given the consensus of other express licenses, the proposed license has a 2% royalty for the base. After the royalty rate, the next term on the sheet is the equity. Figures 4 and 5 show that collecting equity as part of the startup licensing is popular, particularly with express licenses. Figure 6 shows that TransACT licenses have a mean equity consideration of about 7% equity. An additional breakdown of the data was added by observing the difference in equity between licenses that included antidilution protection and those that did not. It was expected based on interviews and best practice that the equity rates would be higher for those that did not collect antidilution, but the opposite was observed (Horton and Rees Colorado Boulder Interview) (Horton and Leute Osage Interview). One possible reason for this is that licenses without antidilution protection may be seeking monetization primarily through other means. This was only somewhat supported by Figure 3 which shows that the mean royalty rate was only about 0.5% higher for licenses that did not include antidilution protection. Similar analysis was not performed for the express licenses as almost all of the express licenses analyzed included antidilution protections or something similar. The mean equity collected by the express licenses was 5%, again this is lower than for

normal licenses, but this is expected for the reasons previously given. As such, for the suggested terms, the mixed case was given an equity consideration of 5%. As for antidilution, this was added to the license based on the interviews, best practice, and the data collected from the express licenses. Colorado Boulder said that \$1M to \$5M of antidilution was expected by national investors for physical science startups (Horton and Rees Colorado Boulder Interview). As such, the base case was given \$3M as to be near the middle of the range. The next term, sublicensing consideration, was one term that previously had a standard value in UARF startup licenses. This value, 50%, was found to be very high relative to much of the environment based on Figure 8. The mean and median of simple licenses were around 25% for TransACT licenses. Licenses that were tiered tended to start high, at around 40%, but end low, at about 18%. Express licenses tended to start lower and end lower, at about 24% and 16% respectively. These terms are rather generous, so for the base case a tiered system more in line with the TransACT licenses is used. As such, it starts at 35% and drops to 20% over the course of three milestones. As these milestones are reached, milestone payments are not collected in order to better encourage the startup to pursue milestones. The final term on the provided term sheet is the minimum annual royalty. Figures 12 and 13 show that minimum annual royalties and yearly fees are much more popular with express licenses than with TransACT licenses. The reason why this is the case was not found during research, however minimum annual royalties may pose a form of longer-term revenue for express licenses which helps to recoup early lost revenue due to the generous terms of the licenses. Based on Figures 14 and 15, the minimum annual royalty generally rises with time but is not collected at all for the first few years of the license. The mean year for the first minimum annual royalty payment is about year 4 for express licenses, presumably again because of the philosophy that express licenses should be favorable for the licensee. Because of this, the recommended terms do not collect minimum annual royalties until the 4th year of the license. The scale from \$5,000 to \$40,000 incrementing at \$5,000 a year was selected because it was a common rate found from online licenses and should help

with long term revenue (Hardware, device, and materials startups - um - innovation partnerships). Several more terms were decided based on best practice and experience. For future improvements, it was decided to not include a clause for them in the license. Not every startup requires future improvements but those that do may request future improvements with the consent of the researchers. The payment of past patent costs has also been reworked. Previously, the UARF license required all past patent costs to be repaid within 30 days of signing the license. This term was found to be too aggressive and UARF usually pushed back the due date for past patent cost payments . As such this clause has been reworked to require the first third to be paid at the end of the second year, and then another third in the third year and the final third in the fourth year. Though these are the main terms determined by research, the full license with all its terms may be found in the appendix. For future recommendations, the license should be vetted through common investors and entrepreneurs in order to gain community support. Licensing Colorado Boulder's licensing with EASE program should also be considered due to the benefits of a recognized program supported by Osage University Partners. If the vetting reveals any missing details or suggests changes to the license, these should be fixed and carried out before implementation. Once implemented, the effectiveness of the license should be monitored over the coming years and adjusted as necessary.

In conclusion, the project has accomplished its goal of creating a standard express license for University of Akron technology startups. The terms therein are based substantially from a body of research, interviews, and industry best practices. With this new licensing system, negotiation time and cost should be reduced, university and startup relations should be improved, and startups should be advantageously positioned.

#### **Works Cited**

- "Bayh-Dole Act." *Office of Research & Innovation*, Drexel University, 2020, https://drexel.edu/research/innovation/technology-commercialization/bayh-dole-act/.
- "Hardware, Device, and Materials Startups Um Innovation Partnerships." *UM*, Innovation Partnerships University of Michigan, 27 Sept. 2022, https://innovationpartnerships.umich.edu/innovation-partnerships-startup-licensing-practices/hardware-device-and-materials-startups/.
- "Carolina Express License Agreement User Guide Office of Technology ..." *CAROLINA EXPRESS LICENSE AGREEMENT USER GUIDE*, The University of North Carolina at Chapel Hill, 2021, https://otc.unc.edu/wp-content/uploads/sites/295/2021/05/Carolina-Express-License-USER-GUIDE-2021-FINAL.pdf.
- "Express License vs Option." 1819 Innovation Hub, The University of Cincinnati, https://innovation.uc.edu/ideas-and-innovations/agreements/express-license-vs-option.html.
- Fernando, Jason. "Equity for Shareholders: How It Works and How to Calculate It." *Investopedia*, Investopedia, 25 Mar. 2023, https://www.investopedia.com/terms/e/equity.asp.
- Herskowitz, Orin, et al. "Toolkits." *AUTM*, AUTM, 2022, https://autm.net/surveys-and-tools/tools/term-sheet.

Horton, Drew W, and Bryce Pilz. "Michigan Interview." 31 Jan. 2023.

Horton, Drew W, and Brynmor P Rees. "Colorado Boulder Interview." 19 Jan. 2023.

Horton, Drew W, and Linda Portillo. "Arizona Interview." 28 Feb. 2023.

Horton, Drew W, and Luis R Mejia. "Stanford Interview." 23 Jan 2023.

Horton, Drew W, and Michelle Chitambar. "Illinois Interview." 15 Mar. 2023.

Horton, Drew W, and Kirsten Leute. "Osage Interview." 8 Feb. 2023.

- "Husky Fast Start." *CoMotion*, University of Washington, 14 Dec. 2022, https://comotion.uw.edu/licensing/husky-fast-start/#:~:text=Description,employees%20who%20developed%20the%20innovation.
- "In the Public Interest: Nine Points to Consider in Licensing ... AUTM." *AUTM*, AUTM, 6 Mar. 2007, https://www.autm.net/AUTMMain/media/Advocacy/Documents/Points\_to\_Consider.pdf.

- Kenton, Will. "Anti-Dilution Provision: Definition, How It Works, Types, Formula." *Investopedia*, Investopedia, 2 Nov. 2022, https://www.investopedia.com/terms/a/anti-dilutionprovision.asp#:~:text=Anti%2Ddilution%20provisions%20act%20as,total%20number%20of%20shares%20outstanding.
- Leute, Kirsten. "Anatomy of a License Agreement AUTM." *AUTM Technology Transfer Practice Manual*, AUTM, Jan. 2010, https://www.autm.net/AUTMMain/media/ThirdEditionPDFs/V4/TTP\_V4\_AnatomyLicens e.pdf.
- Taylor, Michelle. "The Top 10 Universities in Startup Creation." *Lab Equipment*, Laboratory Equipment, 12 May 2020, https://www.laboratoryequipment.com/564195-The-Top-10-Universities-in-Startup-Creation/.
- "TransACT." *Technology Transfer Databases GTP, Statt, Transact*, AUTM, https://autm.net/transact.
- "Yale Ventures at Yale University: Innovation and Entrepreneurship." *Yale Ventures at Yale University | Innovation and Entrepreneurship*, Yale Ventures, 2023, https://ventures.yale.edu/.

#### **Appendices**

### Appendix A: The Mixed license

#### LICENSE AGREEMENT

#### **PREAMBLE**

This Agreement is made and entered into to be effective the day of, 202_, by and between the UNIVERSITY OF AKRON RESEARCH FOUNDATION, a corporation not for profit under Section 17 O.R.C., and a support organization of The University of Akron ("UA") having its principal office at 170 University Circle, Akron OH 44325-2103, U.S.A. (hereinafter referred to as "UARF"), and, a corporation duly organized under
he laws of the State ofand having its principal office at
(hereinafter referred to
ns "Licensee").
WITNESSETH
WHEREAS, UARF is the exclusive licensee under certain "Patent Rights" (as later defined nerein) relating to
and
as the right to grant licenses under said Patent Rights;

WHEREAS, UARF desires to have the Patent Rights utilized in the public interest and is willing to grant a license thereunder; and

WHEREAS, Licensee intends to develop, produce, manufacture, market and/or sell products similar to the "Licensed Product(s)" (as later defined herein) and is willing to commit itself to a diligent program of exploiting the Patent Rights so that public utilization shall result therefrom; and

WHEREAS, Licensee desires to obtain a license under the Patent Rights upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

# **ARTICLE I. DEFINITIONS**

For the purposes of this Agreement, the following words and phrases shall have the following meanings:

- 1.1. "Licensee" shall include: a related company of Licensee, the voting stock of which is, directly or indirectly, at least fifty percent (50%) owned or controlled by Licensee; an organization which directly or indirectly controls more than fifty percent (50%) of the voting stock of Licensee; and an organization, the majority ownership of which is, directly or indirectly, common to the ownership of Licensee.
- 1.2. "Patent Rights" shall mean the Patent Applications listed in Appendix A hereto and any patent issued from said applications and from divisionals and continuations of said applications; and any corresponding applications or patents issuing thereon in the Territory as defined in Article 1.7.

- 1.3. "Technology" shall mean the \_\_\_\_\_\_\_disclosed in and covered by the Patent Rights.
- 1.4. A "Licensed Process" shall mean any process that is based upon, covered by or utilizes the Technology in any relevant respect.
- 1.5. A "Licensed Product" shall mean any product or part of thereof that is based upon, covered by, or utilizes the Technology or is made by a Licensed Process.
- 1.6. "Net Sales" shall mean Licensee's and its sublicensees' billings for Licensed Products sold or leased hereunder less the sum of the following: discounts allowed in amounts customary in the trade; sales, tariff duties and/or use taxes directly imposed and with reference to particular sales; outbound transportation prepaid or allowed; and amounts allowed or credited on returns.

No deductions shall be made for commissions paid to individuals whether they are with independent sales agencies or regularly employed by Licensee and on its payroll, or for cost of collections. Licensed Products shall be considered "sold" or "leased" when used, billed out or invoiced. If the Licensed Product is used by, sold or leased to a related person or is leased or exchanged for a consideration other than money, billings shall be the gross selling price of comparable Licensed Products sold in arm's length transactions by Licensee or, if no sales or leases of comparable Licensed Products have been made, then the fair market value there of.

1.7.	"Territory" shall mean	
1.8.	"Field" shall mean	

#### **ARTICLE II. GRANT**

- 2.1. UARF hereby grants to Licensee the exclusive right and license in the Territory to make, have made, use, sublicense, lease and sell the Licensed Products for use in the Field, and to practice and to sublicense the Licensed Processes in the Field, and the right to use Technology knowhow directly related thereto, to the end of the term for which the Patent Rights are granted unless sooner terminated according to the terms hereof. In addition, UARF hereby grants Licensee an option to acquire a license in UA patents to the extent such rights can be granted and only to the extent necessary for Licensee to avoid infringement of such patents in Licensee's practice of Licensed Processes and Licensed Products granted under this Article 2.1.
- 2.2. UARF reserves to UA the right to use the Technology and to practice under the Patent Rights for UA's noncommercial research and education purposes and, to the extent the Technology was derived and developed under federal funding, UARF reserves the right for the US Government to use for governmental purposes.
- 2.3. The license granted hereunder shall not be construed to confer any rights upon Licensee by implication, estoppel or otherwise as to any technology except as specifically set forth herein.

- 2.4. Licensee agrees that any sublicenses granted by it shall contain such provisions as are necessary for Licensee to meet its obligations under this Agreement and to reasonably protect the interests of UARF with regard to such sublicense.
- 2.5. Licensee agrees to forward to UARF a copy of any and all fully executed sublicense agreements for Licensed Products or Licensed Processes and further agrees to forward to UARF annually a copy of such reports received by Licensee from its sublicensees during the preceding twelve (12) month period under the sublicenses as shall be pertinent to a royalty accounting under said sublicense agreements.
- 2.6. Licensee shall report to UARF within thirty (30) days after receiving from sublicensees anything of value in lieu of cash payments in consideration for any sublicense under this Agreement, which consideration shall be subject to the express written approval of UARF.
- 2.7. Termination under any of the provisions of this Agreement of the license granted to Licensee in this Agreement shall terminate all sublicenses which may have been granted by Licensee, provided that any sublicensee may elect to continue its sublicensee by advising UARF in writing, within (60) sixty days of the sublicensee's receipt of written notice of such termination, of its election and of its agreement to assume in respect to UARF all the obligations (including obligations for payment) contained in its sublicensing agreement with Licensee. Any sublicense granted by Licensee shall contain provisions corresponding to those of this paragraph respecting termination and the conditions of continuance of sublicenses.

# ARTICLE III. DUE DILIGENCE

#### **ARTICLE IV. ROYALTIES and FEES**

- 4.1. For the rights, privileges and license granted hereunder, Licensee shall pay fees and royalties to UARF in the manner hereinafter provided to the end of the term of the Patent Rights or until this Agreement shall be terminated as hereinafter provided:
  - (a) A License fee of that number of shares of each class of Licensee's stock as will amount to not less than five percent (5%) of the total authorized shares for each class; and such additional number of shares from time-to-time as may be necessary for UARF to maintain at all times at least a five percent (5%) ownership stake and share in Licensee on a Fully-Diluted basis. Registration and transfer rights for such shares shall be no less favorable than that afforded other insiders, and shall piggyback on initial or, with respect to additional shares, the next, Licensee registrations. The License fee shall be deemed earned and due immediately upon the execution of this Agreement.

- (b) Anti-Dilution Protection. Licensee will issue UARF, without further consideration, any additional shares of stock of the class issued pursuant to Section 4.1(a) necessary to ensure that the number of shares issued UARF pursuant to Section 4.1(a) and this Section 4.1(b) does not represent less than 5% of the shares issued and outstanding on a Fully-Diluted Basis. The Anti-Dilution Protection under this Section 4.1(b) will continue until an amount of at least \$3,000,000, when aggregated with prior closings, has been raised by The Licensee in a bona fide round of financing through the sale of securities or by conversion of instruments convertible into equity ("Dilution Trigger"). If the Dilution Trigger is reached or exceeded during a specific round of funding, Anti-Dilution Protection will extend to the total amount of funding raised through the closing of that specific round of funding.
- (c) Beginning January 1, 202\_, Running Royalties equal to two percent (2%) of Net Sales of the Licensed Products and Licensed Processes made, used, leased or sold by or for Licensee. Beginning January 1, 202\_, Running Royalties equal to two percent (2%) of Net Sales of the Licensed Products and Licensed Processes made, used, leased or sold by or for Licensee.
- (d) Minimum Royalties of Five Thousand Dollars (\$5,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Ten Thousand Dollars (\$10,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Fifteen Thousand Dollars (\$20,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Twenty Thousand Dollars (\$40,000) for the year 202\_ are payable March 31, 202\_, and each March 31st thereafter. Licensee may offset Running Royalties earned and paid in any calendar year against the Minimum Royalty payable for that year.
- (e) Licensee will pay, or reimburse UARF for paying, all Patent Expenses incurred on or after the Effective Date within 30 days of its receipt of University's invoice for such Patent Expenses. UARF reserves the right to request advance payments for certain Patent Expenses, at UARF's discretion. Two years from the Effective Date, to the extent not previously reimbursed to University by Licensee or a Third Party, Licensee will reimburse University for one-third of all Patent Expenses incurred prior to the Effective Date. An additional payment of one-third of all Patent Expenses incurred prior to the Effective Date is due three years from the Effective Date. Another additional payment of one-third of all Patent Expenses incurred prior to the Effective Date is due four years from the Effective Date. The amount of unreimbursed Patent Expenses invoiced to University prior to the Effective Date is approximately [\*XXX\*] US dollars (\$XXX).
- (f) Thirty percent (35%) of all License Fees received by Licensee from any sublicensee unless reduced by achievement of milestones by Company or its Sublicensees prior to execution of the particular Sublicense in accordance with the schedule below. As used in the preceding sentence, the term "License Fees" means fees, consideration or anything else of value received by Licensee for license of rights to the Licensed Products, Patent Rights, and Licensed Processes, excluding Running Royalties paid to Licensee and remitted to UARF pursuant to 4.1(c) hereof with respect to sublicensee's Net Sales.

Milestone Has Been Achieved at the Date of Execution of the Sublicensee	Sublicense Consideration Percentage
Milestone 1	30%
Milestone 2	25%
Milestone 3	20%

4.2. Royalty and Fee payments shall be paid in United States dollars in Akron, Ohio or at such other place as UARF may reasonably designate consistent with the laws and regulations controlling in any foreign country. If any currency conversion shall be required in connection with the payment of Royalties or Fees hereunder, such conversion shall be made by using the exchange rate prevailing at the Chase Manhattan Bank (N.A.) on the last business day of the calendar semi-annual reporting period to which such royalty payments relate.

# **ARTICLE V. REPORTS AND RECORDS**

- 5.1. Licensee shall keep full, true and accurate books of account containing all particulars that may be necessary for the purpose of showing the amounts payable to UARF hereunder, and said books and the supporting data shall be open at all reasonable times for five (5) years following the end of the calendar year to which they pertain, to the inspection of UARF or its agents for the purpose of verifying Licensee's Royalty and Fee statement or compliance in other respects with this Agreement.
- 5.2. Licensee, within sixty (60) days after June 30, and December 31, of each year, shall deliver to UARF true and accurate reports, giving such particulars of the business conducted by Licensee and its sublicensees during the preceding six-month period under this Agreement as shall be pertinent to a royalty accounting hereunder, including an accounting for Licensed Processes used and Licensed Products and the billings, deductions and royalties due with respect thereto.
- 5.3. With each such report submitted, Licensee shall pay to UARF the Royalties and Fees due and payable under this Agreement. If no Royalties or Fees shall be due, Licensee shall so report.
- 5.4. The payments set forth in this Agreement shall, if overdue, bear interest until payment at a per annum rate of the prime rate as reported by Chase Manhattan Bank, N.A. plus four percent (4%). The payment of such interest shall not foreclose UARF from exercising any other rights it may have as a consequence of the lateness of the payment.

## **ARTICLE VI. PATENT PROSECUTION**

- 6.1. UARF shall be responsible for and ensure the prompt issuance of the Patent Rights and that such Patent Rights shall be maintained during the term of this Agreement in the Territory. UARF shall also be responsible for obtaining such other available Patent Rights protection as Licensee may request at Licensee's sole expense. Licensee shall reimburse UARF for past costs incurred by UARF and UA with respect to all Patent Rights in the Territory, to be paid in full within 30 days of the effective date of this Agreement and thereafter as such costs are incurred.
- 6.2. If Licensee declines to seek protection in any country in the Territory, or shall at any time decide to discontinue prosecution or maintenance of any patent or patent application filed in any country in the Territory, Licensee agrees to give UARF a minimum of thirty (30) days notice. UARF at its sole discretion and expense, reserves the right to file, issue and/or maintain such patent applications and patents and Licensee will have no further rights with respect thereto.

- 7.1. The parties shall inform each other promptly, in writing, of any alleged infringement of the Patent Rights by a third party, and any available evidence thereof.
- 7.2. During the term of this Agreement, Licensee shall have the right, subject only to approval not unreasonably withheld of UARF, but shall not be obligated to prosecute at its own expense any such infringements of the Patent Rights and, in furtherance of such right, UARF hereby agrees that Licensee may join UARF as a party plaintiff in any such suit, without expense to UARF. The total cost of any such infringement action except as provided in Paragraph 7.4. hereof, commenced or defended solely by Licensee shall be borne by Licensee and Licensee shall keep any recovery including damages for past infringement derived therefrom, provided, that Licensee, after deduction of its reasonable costs expended in pursuit of such infringement, shall remit to UARF a Twenty-five percent (25%) of said recovery. No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without UARF's consent, which consent shall not unreasonably be withheld.
- 7.3. If within six (6) months after having been notified of any alleged infringement, Licensee shall have been unsuccessful in persuading the alleged infringer to desist and shall not have brought and shall not be diligently prosecuting an infringement action, or if Licensee shall notify UARF at any time prior thereto of its intention not to bring suit against any alleged infringer, then, and in those events only, <u>UARF shall have the right</u>, but shall not be obligated, to prosecute at its own expense any infringement of the Patent Rights, and UARF may, for such purposes, use the name of Licensee as party plaintiff.
- 7.4. In the event that Licensee shall undertake the enforcement and/or defense of the Patent Rights by litigation, Licensee may withhold up to fifty percent (50%) of the royalties otherwise thereafter due UARF hereunder and apply the same toward reimbursement of up to fifty percent (50%) of its out-of-pocket expenses, including reasonable attorneys' fees, in connection therewith. The foregoing withholding provision is applicable only to Licensee and not to any successor to Licensee's interests. Any recovery by Licensee of damages for past infringement in any such suit shall be applied first toward reimbursement of UARF for any royalties past due or withheld and applied pursuant to this Article VII, and next in satisfaction of any unreimbursed expenses and legal fees of Licensee relating to the suit. Licensee shall keep the balance remaining from any such recovery subject to the proviso set forth in Article 7.2 above.
- 7.5. In any infringement suit as either party may institute to enforce the Patent Rights pursuant to this Agreement, the other party hereto shall, at the request and expense of the party initiating such suit, cooperate in all respects and, to the extent possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like.
- 7.6. UARF warrants and represents that it has the lawful right to grant the license provided in this Agreement and that it has not granted rights or licenses in derogation of this Agreement. UARF agrees that during the term of this Agreement, or any license granted hereunder, UARF shall not enter into any other agreements that conflict with the rights or obligations provided hereunder, including any rights and obligations that survive termination of this Agreement.

# **ARTICLE VIII. PRODUCT LIABILITY**

8.1. Licensee shall, at all times during the term of this Agreement and thereafter, indemnify, defend and hold UARF, the University and their trustees, officers, employees and affiliates, harmless against all claims and expenses, including legal expenses and reasonable attorneys' fees, arising out of the death of or injury to any person or persons

- or out of any damage to property and against any other claim, proceeding, demand, expense and liability of any kind whatsoever, resulting from the Licensee's, Licensee's Affiliated Companies, or any of its sublicensee's production, manufacture, sale, use (both experimental and consumer), lease, consumption or advertisement of the Licensed Product(s) and/or Licensed Process(es) or arising from any obligation of the Licensee hereunder.
- 8.2. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, UARF MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND VALIDITY OF PATENT RIGHTS CLAIMS, ISSUED OR PENDING.

#### **ARTICLE IX. EXPORT CONTROLS**

9.1. It is understood that UARF is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the Export Administration Act of 1979), and that its obligations hereunder are contingent on compliance with applicable United States export laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by Licensee that Licensee shall not export data or commodities to certain foreign countries without prior approval of such agency. UARF neither represents that a license shall not be required nor that, if required, it shall be issued.

#### **ARTICLE X. NON-USE OF NAMES**

10.1. Licensee shall not use the names of UARF, the University of Akron nor of any of its employees, nor any adaptation thereof, in any advertising, promotional or sales literature without prior written consent obtained from UARF in each case, except that Licensee may state that it is licensed by UARF under one or more of the patents and/or applications comprising the Patent Rights.

#### **ARTICLE XI. ASSIGNMENT**

11.1. This Agreement is not assignable except that Licensee may assign this Agreement in connection with any merger, consolidation, sale of all or substantially all of its assets or equity, or sale of a controlling interest in Licensee.

# **ARTICLE XII. ARBITRATION**

12.1. Any and all claims, disputes or controversies arising under, out of, or in connection with this Agreement, including any dispute relating to patent validity or infringement, which have not been resolved by good faith negotiations between the parties, shall be resolved by final and binding arbitration in Akron, Ohio under the rules of the American Arbitration Association, or the Patent Arbitration Rules if applicable, then obtaining. The arbitrators shall have no power to add to, subtract from or modify any of the terms or conditions of this Agreement. Any award rendered in such arbitration may be enforced by either party in either the courts of the State of Ohio or in the United States District Court for the Northern District of Ohio, to whose jurisdiction for such purposes UARF and Licensee each hereby irrevocably consents and submits.

12.2. Notwithstanding the foregoing, nothing in this Article shall be construed to waive any rights or timely performance of any obligations existing under this Agreement.

#### **ARTICLE XIII. TERMINATION**

- 13.1. UARF shall have the right to terminate this Agreement at any time upon notice to Licensee in the event either (a) If Licensee shall file in any court, pursuant to any statute either of the United States or any state, a petition in bankruptcy or insolvency or for the appointment of a receiver or trustee of all or substantially all of Licensee' property, or if Licensee shall make an assignment for the benefit of creditors, or if Licensee shall commit any other affirmative act of insolvency; or (b) if there shall be filed against Licensee in any court, pursuant to any statute either of the United States or any state, an involuntary petition in bankruptcy or insolvency or for reorganization, or if there shall be involuntarily appointed a receiver or trustee of all or substantially all of Licensee's property, unless such petition or appointment is set aside or withdrawn or ceases to be in effect within one hundred twenty (120) days of the date of the filing or the appointment.
- 13.2. Should Licensee fail to pay UARF royalties due and payable hereunder, UARF shall have the right to terminate this Agreement on thirty (30) days' notice, unless Licensee shall pay UARF within the thirty (30) day period, all such royalties and interest due and payable. Upon the expiration of the thirty (30) day period, if Licensee shall not have paid all such royalties and interest due and payable, the rights, privileges and license granted hereunder shall terminate.
- 13.3. Upon any material breach or default of this Agreement by Licensee, other than those occurrences set out in Paragraphs 13.1. and 13.2. hereinabove, which shall always take precedence in that order over any material breach or default referred to in this Paragraph 13.3., UARF shall have the right to terminate this Agreement and the rights, privileges and license granted hereunder by thirty (30) days' notice to Licensee. Such termination shall become effective unless Licensee shall have cured any such breach or default prior to the expiration of the thirty (30) day period.
- 13.4. Licensee shall have the right to terminate this Agreement at any time on thirty (30) days' notice to UARF, and upon payment of all amounts due UARF through the effective date of the termination.
- 13.5. Upon termination of this Agreement for any reason, nothing herein shall be construed to release either party from any obligation that matured prior to the effective date of such termination. Licensee may, however, after the effective date of such termination, sell all Licensed Products, and complete Licensed Products in the process of manufacture at the time of such termination and sell the same, provided that Licensee shall pay to UARF the royalties thereon as required by Article IV of this Agreement and shall submit the reports required by Article V. hereof on the sales of Licensed Products.

#### ARTICLE XIV. PAYMENTS, NOTICES AND OTHER COMMUNICATIONS

14.1. Any payment, notice or other communication pursuant to this Agreement shall be sufficiently made or given on the date of mailing if sent to such party by Certified First Class Mail, Postage Prepaid, addressed to it at its address below or as it shall designate by written notice given to the other party:

In the case of UARF: In the case of Licensee:

University of Akron Research Foundation	
Attention: Business Manager	
170 University Circle	
Akron OH 44325-2103	

## **ARTICLE XV. MISCELLANEOUS PROVISIONS**

- 15.1. This Agreement shall be construed, governed, interpreted and applied in accordance with the laws of the State of Ohio, U.S.A., except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent was granted.
- 15.2. The parties hereto acknowledge that this Agreement sets forth the entire agreement and understanding, and supersedes and makes null and void any and all prior understandings and agreements, of the parties hereto as to the subject matter hereof, and shall not be subject to any change or modification except by the execution of a written instrument subscribed to by the parties hereto.
- 15.3. The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.
- 15.4. Licensee agrees to mark the Licensed Products sold in the United States with all applicable United States patent numbers. All Licensed Products shipped to or sold in other countries shall be marked in such a manner as to conform to the patent laws and practice of the country of manufacture or sale.
- 15.5. The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals and fully executed this Agreement

University of Akron Research Foundation	Licensee
Ву	•
Name	
Title	
Date	Date
Acknowledged and Agreed to:	

Inventor	University of Akron
Appendix B: The Equity forward lice	<u>ense</u>
	LICENSE AGREEMENT
	PREAMBLE
by and between the UNIVERSITY (under Section 17 O.R.C., and a supoffice at 170 University Circle, Akro	nd entered into to be effective the day of, 202_, DF AKRON RESEARCH FOUNDATION, a corporation not for profit opport organization of The University of Akron ("UA") having its principal in OH 44325-2103, U.S.A. (hereinafter referred to as "UARF"), and, a corporation duly organized under
the laws of the State of	and having its principal office at(hereinafter referred to
as "Licensee").	
	WITNESSETH
WHEREAS, UARF is the exherein) relating to	xclusive licensee under certain "Patent Rights" (as later defined
has the right to grant licenses unde	and
has the right to grant licenses unde	i salu Faterit Nigrits,
WHEREAS, UARF desires grant a license thereunder; and	to have the Patent Rights utilized in the public interest and is willing to
	ids to develop, produce, manufacture, market and/or sell products

whereas, Licensee intends to develop, produce, manufacture, market and/or sell products similar to the "Licensed Product(s)" (as later defined herein) and is willing to commit itself to a diligent program of exploiting the Patent Rights so that public utilization shall result therefrom; and

WHEREAS, Licensee desires to obtain a license under the Patent Rights upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

# **ARTICLE I. DEFINITIONS**

For the purposes of this Agreement, the following words and phrases shall have the following meanings:

1.8. "Licensee" shall include: a related company of Licensee, the voting stock of which is, directly or indirectly, at least fifty percent (50%) owned or controlled by Licensee; an organization which directly or indirectly controls more than fifty percent (50%) of the voting stock of Licensee; and an organization, the majority ownership of which is, directly or indirectly, common to the ownership of Licensee.

1.9.	"Patent Rights" shall mean the Patent Applications listed in Appendix A hereto and any
	patent issued from said applications and from divisionals and continuations of said
	applications; and any corresponding applications or patents issuing thereon in the
	Territory as defined in Article 1.7.

1.10.	"Technology" shall mean the	
		disclosed in and covered
	by the Patent Rights.	

- 1.11. A "Licensed Process" shall mean any process that is based upon, covered by or utilizes the Technology in any relevant respect.
- 1.12. A "Licensed Product" shall mean any product or part of thereof that is based upon, covered by, or utilizes the Technology or is made by a Licensed Process.
- 1.13. "Net Sales" shall mean Licensee's and its sublicensees' billings for Licensed Products sold or leased hereunder less the sum of the following: discounts allowed in amounts customary in the trade; sales, tariff duties and/or use taxes directly imposed and with reference to particular sales; outbound transportation prepaid or allowed; and amounts allowed or credited on returns.

No deductions shall be made for commissions paid to individuals whether they are with independent sales agencies or regularly employed by Licensee and on its payroll, or for cost of collections. Licensed Products shall be considered "sold" or "leased" when used, billed out or invoiced. If the Licensed Product is used by, sold or leased to a related person or is leased or exchanged for a consideration other than money, billings shall be the gross selling price of comparable Licensed Products sold in arm's length transactions by Licensee or, if no sales or leases of comparable Licensed Products have been made, then the fair market value there of.

1.14.	"Territory" shall mean
1.8.	"Field" shall mean

#### **ARTICLE II. GRANT**

- 2.8. UARF hereby grants to Licensee the exclusive right and license in the Territory to make, have made, use, sublicense, lease and sell the Licensed Products for use in the Field, and to practice and to sublicense the Licensed Processes in the Field, and the right to use Technology knowhow directly related thereto, to the end of the term for which the Patent Rights are granted unless sooner terminated according to the terms hereof. In addition, UARF hereby grants Licensee an option to acquire a license in UA patents to the extent such rights can be granted and only to the extent necessary for Licensee to avoid infringement of such patents in Licensee's practice of Licensed Processes and Licensed Products granted under this Article 2.1.
- 2.9. UARF reserves to UA the right to use the Technology and to practice under the Patent Rights for UA's noncommercial research and education purposes and, to the extent the Technology was derived and developed under federal funding, UARF reserves the right for the US Government to use for governmental purposes.

- 2.10. The license granted hereunder shall not be construed to confer any rights upon Licensee by implication, estoppel or otherwise as to any technology except as specifically set forth herein.
- 2.11. Licensee agrees that any sublicenses granted by it shall contain such provisions as are necessary for Licensee to meet its obligations under this Agreement and to reasonably protect the interests of UARF with regard to such sublicense.
- 2.12. Licensee agrees to forward to UARF a copy of any and all fully executed sublicense agreements for Licensed Products or Licensed Processes and further agrees to forward to UARF annually a copy of such reports received by Licensee from its sublicensees during the preceding twelve (12) month period under the sublicenses as shall be pertinent to a royalty accounting under said sublicense agreements.
- 2.13. Licensee shall report to UARF within thirty (30) days after receiving from sublicensees anything of value in lieu of cash payments in consideration for any sublicense under this Agreement, which consideration shall be subject to the express written approval of UARF.
- 2.14. Termination under any of the provisions of this Agreement of the license granted to Licensee in this Agreement shall terminate all sublicenses which may have been granted by Licensee, provided that any sublicensee may elect to continue its sublicense by advising UARF in writing, within (60) sixty days of the sublicensee's receipt of written notice of such termination, of its election and of its agreement to assume in respect to UARF all the obligations (including obligations for payment) contained in its sublicensing agreement with Licensee. Any sublicense granted by Licensee shall contain provisions corresponding to those of this paragraph respecting termination and the conditions of continuance of sublicenses.

# ARTICLE III. DUE DILIGENCE

# **ARTICLE IV. ROYALTIES and FEES**

- 4.3. For the rights, privileges and license granted hereunder, Licensee shall pay fees and royalties to UARF in the manner hereinafter provided to the end of the term of the Patent Rights or until this Agreement shall be terminated as hereinafter provided:
  - (g) A License fee of that number of shares of each class of Licensee's stock as will amount to not less than ten percent (10%) of the total authorized shares for each class; and such additional number of shares from time-to-time as may be necessary for UARF to maintain at all times at least a ten percent (10%) ownership stake and share in Licensee on a Fully-Diluted basis. Registration and transfer rights for such shares shall be no less favorable than that afforded other insiders, and shall piggyback on initial or, with respect to additional shares,

the next, Licensee registrations. The License fee shall be deemed earned and due immediately upon the execution of this Agreement.

- (h) Anti-Dilution Protection. Licensee will issue UARF, without further consideration, any additional shares of stock of the class issued pursuant to Section 4.1(a) necessary to ensure that the number of shares issued UARF pursuant to Section 4.1(a) and this Section 4.1(b) does not represent less than 5% of the shares issued and outstanding on a Fully-Diluted Basis. The Anti-Dilution Protection under this Section 4.1(b) will continue until an amount of at least \$5,000,000, when aggregated with prior closings, has been raised by The Licensee in a bona fide round of financing through the sale of securities or by conversion of instruments convertible into equity ("Dilution Trigger"). If the Dilution Trigger is reached or exceeded during a specific round of funding, Anti-Dilution Protection will extend to the total amount of funding raised through the closing of that specific round of funding.
- (i) Beginning January 1, 202\_, Running Royalties equal to one-half percent (0.5%) of Net Sales of the Licensed Products and Licensed Processes made, used, leased or sold by or for Licensee. Beginning January 1, 202\_, Running Royalties equal to one-half percent (0.5%) of Net Sales of the Licensed Products and Licensed Processes made, used, leased or sold by or for Licensee.
- (j) Minimum Royalties of Five Thousand Dollars (\$5,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Ten Thousand Dollars (\$10,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Fifteen Thousand Dollars (\$20,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Twenty Thousand Dollars (\$40,000) for the year 202\_ are payable March 31, 202\_, and each March 31st thereafter. Licensee may offset Running Royalties earned and paid in any calendar year against the Minimum Royalty payable for that year.
- (k) Licensee will pay, or reimburse UARF for paying, all Patent Expenses incurred on or after the Effective Date within 30 days of its receipt of University's invoice for such Patent Expenses. UARF reserves the right to request advance payments for certain Patent Expenses, at UARF's discretion. Two years from the Effective Date, to the extent not previously reimbursed to University by Licensee or a Third Party, Licensee will reimburse University for one-third of all Patent Expenses incurred prior to the Effective Date. An additional payment of one-third of all Patent Expenses incurred prior to the Effective Date is due three years from the Effective Date. Another additional payment of one-third of all Patent Expenses incurred prior to the Effective Date is due four years from the Effective Date. The amount of unreimbursed Patent Expenses invoiced to University prior to the Effective Date is approximately [\*XXX\*] US dollars (\$XXX).

(I)

(m) Twenty percent (20%) of all License Fees received by Licensee from any sublicensee unless reduced by achievement of milestones by Company or its Sublicensees prior to execution of the particular Sublicense in accordance with the schedule below. As used in the preceding sentence, the term "License Fees" means fees, consideration or anything else of value received by Licensee for license of rights to the Licensed Products, Patent Rights, and Licensed Processes, excluding Running Royalties paid to Licensee and remitted to UARF pursuant to 4.1(c) hereof with respect to sublicensee's Net Sales.

Milestone Has Been Achieved at the Date of Execution of the Sublicensee	Sublicense Consideration Percentage
Milestone 1	20%
Milestone 2	15%
Milestone 3	10%

4.4. Royalty and Fee payments shall be paid in United States dollars in Akron, Ohio or at such other place as UARF may reasonably designate consistent with the laws and regulations controlling in any foreign country. If any currency conversion shall be required in connection with the payment of Royalties or Fees hereunder, such conversion shall be made by using the exchange rate prevailing at the Chase Manhattan Bank (N.A.) on the last business day of the calendar semi-annual reporting period to which such royalty payments relate.

# **ARTICLE V. REPORTS AND RECORDS**

- 5.5. Licensee shall keep full, true and accurate books of account containing all particulars that may be necessary for the purpose of showing the amounts payable to UARF hereunder, and said books and the supporting data shall be open at all reasonable times for five (5) years following the end of the calendar year to which they pertain, to the inspection of UARF or its agents for the purpose of verifying Licensee's Royalty and Fee statement or compliance in other respects with this Agreement.
- 5.6. Licensee, within sixty (60) days after June 30, and December 31, of each year, shall deliver to UARF true and accurate reports, giving such particulars of the business conducted by Licensee and its sublicensees during the preceding six-month period under this Agreement as shall be pertinent to a royalty accounting hereunder, including an accounting for Licensed Processes used and Licensed Products and the billings, deductions and royalties due with respect thereto.
- 5.7. With each such report submitted, Licensee shall pay to UARF the Royalties and Fees due and payable under this Agreement. If no Royalties or Fees shall be due, Licensee shall so report.
- 5.8. The payments set forth in this Agreement shall, if overdue, bear interest until payment at a per annum rate of the prime rate as reported by Chase Manhattan Bank, N.A. plus four percent (4%). The payment of such interest shall not foreclose UARF from exercising any other rights it may have as a consequence of the lateness of the payment.

#### **ARTICLE VI. PATENT PROSECUTION**

- 6.3. UARF shall be responsible for and ensure the prompt issuance of the Patent Rights and that such Patent Rights shall be maintained during the term of this Agreement in the Territory. UARF shall also be responsible for obtaining such other available Patent Rights protection as Licensee may request at Licensee's sole expense. Licensee shall reimburse UARF for past costs incurred by UARF and UA with respect to all Patent Rights in the Territory, to be paid in full within 30 days of the effective date of this Agreement and thereafter as such costs are incurred.
- 6.4. If Licensee declines to seek protection in any country in the Territory, or shall at any time decide to discontinue prosecution or maintenance of any patent or patent application filed in any country in the Territory, Licensee agrees to give UARF a minimum of thirty (30) days notice. UARF at its sole discretion and expense, reserves the right to file, issue

and/or maintain such patent applications and patents and Licensee will have no further rights with respect thereto.

#### **ARTICLE VII. INFRINGEMENT**

- 7.7. The parties shall inform each other promptly, in writing, of any alleged infringement of the Patent Rights by a third party, and any available evidence thereof.
- 7.8. During the term of this Agreement, Licensee shall have the right, subject only to approval not unreasonably withheld of UARF, but shall not be obligated to prosecute at its own expense any such infringements of the Patent Rights and, in furtherance of such right, UARF hereby agrees that Licensee may join UARF as a party plaintiff in any such suit, without expense to UARF. The total cost of any such infringement action except as provided in Paragraph 7.4. hereof, commenced or defended solely by Licensee shall be borne by Licensee and Licensee shall keep any recovery including damages for past infringement derived therefrom, provided, that Licensee, after deduction of its reasonable costs expended in pursuit of such infringement, shall remit to UARF a Twenty-five percent (25%) of said recovery. No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without UARF's consent, which consent shall not unreasonably be withheld.
- 7.9. If within six (6) months after having been notified of any alleged infringement, Licensee shall have been unsuccessful in persuading the alleged infringer to desist and shall not have brought and shall not be diligently prosecuting an infringement action, or if Licensee shall notify UARF at any time prior thereto of its intention not to bring suit against any alleged infringer, then, and in those events only, <u>UARF shall have the right</u>, but shall not be obligated, to prosecute at its own expense any infringement of the Patent Rights, and UARF may, for such purposes, use the name of Licensee as party plaintiff.
- 7.10. In the event that Licensee shall undertake the enforcement and/or defense of the Patent Rights by litigation, Licensee may withhold up to fifty percent (50%) of the royalties otherwise thereafter due UARF hereunder and apply the same toward reimbursement of up to fifty percent (50%) of its out-of-pocket expenses, including reasonable attorneys' fees, in connection therewith. The foregoing withholding provision is applicable only to Licensee and not to any successor to Licensee's interests. Any recovery by Licensee of damages for past infringement in any such suit shall be applied first toward reimbursement of UARF for any royalties past due or withheld and applied pursuant to this Article VII, and next in satisfaction of any unreimbursed expenses and legal fees of Licensee relating to the suit. Licensee shall keep the balance remaining from any such recovery subject to the proviso set forth in Article 7.2 above.
- 7.11. In any infringement suit as either party may institute to enforce the Patent Rights pursuant to this Agreement, the other party hereto shall, at the request and expense of the party initiating such suit, cooperate in all respects and, to the extent possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like.
- 7.12. UARF warrants and represents that it has the lawful right to grant the license provided in this Agreement and that it has not granted rights or licenses in derogation of this Agreement. UARF agrees that during the term of this Agreement, or any license granted hereunder, UARF shall not enter into any other agreements that conflict with the rights or obligations provided hereunder, including any rights and obligations that survive termination of this Agreement.

- 8.3. Licensee shall, at all times during the term of this Agreement and thereafter, indemnify, defend and hold UARF, the University and their trustees, officers, employees and affiliates, harmless against all claims and expenses, including legal expenses and reasonable attorneys' fees, arising out of the death of or injury to any person or persons or out of any damage to property and against any other claim, proceeding, demand, expense and liability of any kind whatsoever, resulting from the Licensee's, Licensee's Affiliated Companies, or any of its sublicensee's production, manufacture, sale, use (both experimental and consumer), lease, consumption or advertisement of the Licensed Product(s) and/or Licensed Process(es) or arising from any obligation of the Licensee hereunder.
- 8.4. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, UARF MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND VALIDITY OF PATENT RIGHTS CLAIMS, ISSUED OR PENDING.

# **ARTICLE IX. EXPORT CONTROLS**

9.1. It is understood that UARF is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the Export Administration Act of 1979), and that its obligations hereunder are contingent on compliance with applicable United States export laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by Licensee that Licensee shall not export data or commodities to certain foreign countries without prior approval of such agency. UARF neither represents that a license shall not be required nor that, if required, it shall be issued.

# **ARTICLE X. NON-USE OF NAMES**

10.1. Licensee shall not use the names of UARF, the University of Akron nor of any of its employees, nor any adaptation thereof, in any advertising, promotional or sales literature without prior written consent obtained from UARF in each case, except that Licensee may state that it is licensed by UARF under one or more of the patents and/or applications comprising the Patent Rights.

# **ARTICLE XI. ASSIGNMENT**

11.2. This Agreement is not assignable except that Licensee may assign this Agreement in connection with any merger, consolidation, sale of all or substantially all of its assets or equity, or sale of a controlling interest in Licensee.

# **ARTICLE XII. ARBITRATION**

12.3. Any and all claims, disputes or controversies arising under, out of, or in connection with this Agreement, including any dispute relating to patent validity or infringement, which have not been resolved by good faith negotiations between the parties, shall be resolved by final and binding arbitration in Akron, Ohio under the rules of the American Arbitration Association, or the Patent Arbitration Rules if applicable, then obtaining. The arbitrators shall have no power to add to, subtract from or modify any of the terms or conditions of

- this Agreement. Any award rendered in such arbitration may be enforced by either party in either the courts of the State of Ohio or in the United States District Court for the Northern District of Ohio, to whose jurisdiction for such purposes UARF and Licensee each hereby irrevocably consents and submits.
- 12.4. Notwithstanding the foregoing, nothing in this Article shall be construed to waive any rights or timely performance of any obligations existing under this Agreement.

#### **ARTICLE XIII. TERMINATION**

- 13.6. UARF shall have the right to terminate this Agreement at any time upon notice to Licensee in the event either (a) If Licensee shall file in any court, pursuant to any statute either of the United States or any state, a petition in bankruptcy or insolvency or for the appointment of a receiver or trustee of all or substantially all of Licensee' property, or if Licensee shall make an assignment for the benefit of creditors, or if Licensee shall commit any other affirmative act of insolvency; or (b) if there shall be filed against Licensee in any court, pursuant to any statute either of the United States or any state, an involuntary petition in bankruptcy or insolvency or for reorganization, or if there shall be involuntarily appointed a receiver or trustee of all or substantially all of Licensee's property, unless such petition or appointment is set aside or withdrawn or ceases to be in effect within one hundred twenty (120) days of the date of the filing or the appointment.
- 13.7. Should Licensee fail to pay UARF royalties due and payable hereunder, UARF shall have the right to terminate this Agreement on thirty (30) days' notice, unless Licensee shall pay UARF within the thirty (30) day period, all such royalties and interest due and payable. Upon the expiration of the thirty (30) day period, if Licensee shall not have paid all such royalties and interest due and payable, the rights, privileges and license granted hereunder shall terminate.
- 13.8. Upon any material breach or default of this Agreement by Licensee, other than those occurrences set out in Paragraphs 13.1. and 13.2. hereinabove, which shall always take precedence in that order over any material breach or default referred to in this Paragraph 13.3., UARF shall have the right to terminate this Agreement and the rights, privileges and license granted hereunder by thirty (30) days' notice to Licensee. Such termination shall become effective unless Licensee shall have cured any such breach or default prior to the expiration of the thirty (30) day period.
- 13.9. Licensee shall have the right to terminate this Agreement at any time on thirty (30) days' notice to UARF, and upon payment of all amounts due UARF through the effective date of the termination.
- 13.10. Upon termination of this Agreement for any reason, nothing herein shall be construed to release either party from any obligation that matured prior to the effective date of such termination. Licensee may, however, after the effective date of such termination, sell all Licensed Products, and complete Licensed Products in the process of manufacture at the time of such termination and sell the same, provided that Licensee shall pay to UARF the royalties thereon as required by Article IV of this Agreement and shall submit the reports required by Article V. hereof on the sales of Licensed Products.

## ARTICLE XIV. PAYMENTS, NOTICES AND OTHER COMMUNICATIONS

14.1. Any payment, notice or other communication pursuant to this Agreement shall be sufficiently made or given on the date of mailing if sent to such party by Certified First

Class Mail, Postage Prepaid, addressed to it at its address below or as it shall designate by written notice given to the other party:

	In the	case of UARF:	I	n the case of Licensee:
	Attention 170 Ur	sity of Akron Research Foundation on: Business Manager niversity Circle OH 44325-2103	- - - -	
		ARTICLE XV. MISCELLA	NEOUS PROVISIO	<u>ons</u>
	15.6.	This Agreement shall be construed, governed the laws of the State of Ohio, U.S.A., exertect of any patent shall be determined granted.	cept that question	s affecting the construction and
	15.7.	The parties hereto acknowledge that the understanding, and supersedes and may and agreements, of the parties hereto a subject to any change or modification esubscribed to by the parties hereto.	akes null and void a as to the subject ma	any and all prior understandings atter hereof, and shall not be
	15.8.	The provisions of this Agreement are so this Agreement shall be determined to I body of the law, such invalidity or unent or enforceability of the remaining provisi	oe invalid or unenfo forceability shall no	orceable under any controlling
	15.9.	Licensee agrees to mark the Licensed applicable United States patent number other countries shall be marked in such practice of the country of manufacture of	rs. All Licensed Pr a manner as to co	oducts shipped to or sold in
	15.10.	The failure of either party to assert a rig any term or condition of this Agreement excuse a similar subsequent failure to p party.	shall not constitut	e a waiver of that right or
		NESS WHEREOF, the parties have here reement	eunto set their hand	ds and seals and fully executed
Univers	sity of Al	kron Research Foundation	Licensee	•
Ву			Ву	
Name			Name	
Title			Title	

Date	Date
Acknowledged and Agreed to:	
Inventor	 University of Akron

# **APPENDIX A**

# **Patent Applications**

U.S. Patent No
U.S. Patent Application Serial No.
U.S. Patent Application Serial No.
U.S. Provisional Patent Application Serial No.
Appendix C: The Royalty forward license
LICENSE AGREEMENT
PREAMBLE
This Agreement is made and entered into to be effective the day of, 202_, by and between the UNIVERSITY OF AKRON RESEARCH FOUNDATION, a corporation not for profit under Section 17 O.R.C., and a support organization of The University of Akron ("UA") having its principa office at 170 University Circle, Akron OH 44325-2103, U.S.A. (hereinafter referred to as "UARF"), and
as "Licensee").
WITNESSETH
WHEREAS, UARF is the exclusive licensee under certain "Patent Rights" (as later defined
herein) relating toand has the right to grant licenses under said Patent Rights;
WHEREAS, UARF desires to have the Patent Rights utilized in the public interest and is willing to grant a license thereunder; and
WHEREAS, Licensee intends to develop, produce, manufacture, market and/or sell products similar to the "Licensed Product(s)" (as later defined herein) and is willing to commit itself to a diligent program of exploiting the Patent Rights so that public utilization shall result therefrom; and

WHEREAS, Licensee desires to obtain a license under the Patent Rights upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

#### **ARTICLE I. DEFINITIONS**

For the purposes of this Agreement, the following words and phrases shall have the following meanings:

- 1.15. "Licensee" shall include: a related company of Licensee, the voting stock of which is, directly or indirectly, at least fifty percent (50%) owned or controlled by Licensee; an organization which directly or indirectly controls more than fifty percent (50%) of the voting stock of Licensee; and an organization, the majority ownership of which is, directly or indirectly, common to the ownership of Licensee.
- 1.16. "Patent Rights" shall mean the Patent Applications listed in Appendix A hereto and any patent issued from said applications and from divisionals and continuations of said applications; and any corresponding applications or patents issuing thereon in the Territory as defined in Article 1.7.

1.17.	"Technology" shall mean the	
		disclosed in and covered
	by the Patent Rights.	

- 1.18. A "Licensed Process" shall mean any process that is based upon, covered by or utilizes the Technology in any relevant respect.
- 1.19. A "Licensed Product" shall mean any product or part of thereof that is based upon, covered by, or utilizes the Technology or is made by a Licensed Process.
- 1.20. "Net Sales" shall mean Licensee's and its sublicensees' billings for Licensed Products sold or leased hereunder less the sum of the following: discounts allowed in amounts customary in the trade; sales, tariff duties and/or use taxes directly imposed and with reference to particular sales; outbound transportation prepaid or allowed; and amounts allowed or credited on returns.

No deductions shall be made for commissions paid to individuals whether they are with independent sales agencies or regularly employed by Licensee and on its payroll, or for cost of collections. Licensed Products shall be considered "sold" or "leased" when used, billed out or invoiced. If the Licensed Product is used by, sold or leased to a related person or is leased or exchanged for a consideration other than money, billings shall be the gross selling price of comparable Licensed Products sold in arm's length transactions by Licensee or, if no sales or leases of comparable Licensed Products have been made, then the fair market value there of.

1.21.	"Territory" shall mean
1.8.	"Field" shall mean

## **ARTICLE II. GRANT**

2.15. UARF hereby grants to Licensee the exclusive right and license in the Territory to make, have made, use, sublicense, lease and sell the Licensed Products for use in the Field, and to practice and to sublicense the Licensed Processes in the Field, and the right to

use Technology knowhow directly related thereto, to the end of the term for which the Patent Rights are granted unless sooner terminated according to the terms hereof. In addition, UARF hereby grants Licensee an option to acquire a license in UA patents to the extent such rights can be granted and only to the extent necessary for Licensee to avoid infringement of such patents in Licensee's practice of Licensed Processes and Licensed Products granted under this Article 2.1.

- 2.16. UARF reserves to UA the right to use the Technology and to practice under the Patent Rights for UA's noncommercial research and education purposes and, to the extent the Technology was derived and developed under federal funding, UARF reserves the right for the US Government to use for governmental purposes.
- 2.17. The license granted hereunder shall not be construed to confer any rights upon Licensee by implication, estoppel or otherwise as to any technology except as specifically set forth herein.
- 2.18. Licensee agrees that any sublicenses granted by it shall contain such provisions as are necessary for Licensee to meet its obligations under this Agreement and to reasonably protect the interests of UARF with regard to such sublicense.
- 2.19. Licensee agrees to forward to UARF a copy of any and all fully executed sublicense agreements for Licensed Products or Licensed Processes and further agrees to forward to UARF annually a copy of such reports received by Licensee from its sublicensees during the preceding twelve (12) month period under the sublicenses as shall be pertinent to a royalty accounting under said sublicense agreements.
- 2.20. Licensee shall report to UARF within thirty (30) days after receiving from sublicensees anything of value in lieu of cash payments in consideration for any sublicense under this Agreement, which consideration shall be subject to the express written approval of UARF.
- 2.21. Termination under any of the provisions of this Agreement of the license granted to Licensee in this Agreement shall terminate all sublicenses which may have been granted by Licensee, provided that any sublicensee may elect to continue its sublicense by advising UARF in writing, within (60) sixty days of the sublicensee's receipt of written notice of such termination, of its election and of its agreement to assume in respect to UARF all the obligations (including obligations for payment) contained in its sublicensing agreement with Licensee. Any sublicense granted by Licensee shall contain provisions corresponding to those of this paragraph respecting termination and the conditions of continuance of sublicenses.

# ARTICLE III. DUE DILIGENCE

#### **ARTICLE IV. ROYALTIES and FEES**

- 4.5. For the rights, privileges and license granted hereunder, Licensee shall pay fees and royalties to UARF in the manner hereinafter provided to the end of the term of the Patent Rights or until this Agreement shall be terminated as hereinafter provided:
  - (n) A License fee of that number of shares of each class of Licensee's stock as will amount to not less than two (2%) of the total authorized shares for each class; and such additional number of shares from time-to-time as may be necessary for UARF to maintain at all times at least a two (2%) ownership stake and share in Licensee on a Fully-Diluted basis. Registration and transfer rights for such shares shall be no less favorable than that afforded other insiders, and shall piggyback on initial or, with respect to additional shares, the next, Licensee registrations. The License fee shall be deemed earned and due immediately upon the execution of this Agreement.
  - (o) Anti-Dilution Protection. Licensee will issue UARF, without further consideration, any additional shares of stock of the class issued pursuant to Section 4.1(a) necessary to ensure that the number of shares issued UARF pursuant to Section 4.1(a) and this Section 4.1(b) does not represent less than 0% of the shares issued and outstanding on a Fully-Diluted Basis. The Anti-Dilution Protection under this Section 4.1(b) will continue until an amount of at least \$1,500,000, when aggregated with prior closings, has been raised by The Licensee in a bona fide round of financing through the sale of securities or by conversion of instruments convertible into equity ("Dilution Trigger"). If the Dilution Trigger is reached or exceeded during a specific round of funding, Anti-Dilution Protection will extend to the total amount of funding raised through the closing of that specific round of funding.
  - (p) Beginning January 1, 202\_, Running Royalties equal to four (3%) of Net Sales of the Licensed Products and Licensed Processes made, used, leased or sold by or for Licensee. Beginning January 1, 202\_, Running Royalties equal to four (4%) of Net Sales of the Licensed Products and Licensed Processes made, used, leased or sold by or for Licensee.
  - (q) Minimum Royalties of Five Thousand Dollars (\$5,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Ten Thousand Dollars (\$10,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Fifteen Thousand Dollars (\$20,000) for the year 202\_ are payable March 31, 202\_. Minimum Royalties of Twenty Thousand Dollars (\$40,000) for the year 202\_ are payable March 31, 202\_, and each March 31st thereafter. Licensee may offset Running Royalties earned and paid in any calendar year against the Minimum Royalty payable for that year.
  - (r) Licensee will pay, or reimburse UARF for paying, all Patent Expenses incurred on or after the Effective Date within 30 days of its receipt of University's invoice for such Patent Expenses. UARF reserves the right to request advance payments for certain Patent Expenses, at UARF's discretion. Two years from the Effective Date, to the extent not previously reimbursed to University by Licensee or a Third Party, Licensee will reimburse University for one-third of all Patent Expenses incurred prior to the Effective Date. An additional payment of one-third of all Patent Expenses incurred prior to the Effective Date is due three years from the Effective Date. Another additional payment of one-third of all Patent Expenses incurred prior to the Effective Date is due four years from the Effective Date. The amount of unreimbursed Patent Expenses invoiced to University prior to the Effective Date is approximately [\*XXX\*] US dollars (\$XXX).

(s) Forty Five percent (45%) of all License Fees received by Licensee from any sublicensee unless reduced by achievement of milestones by Company or its Sublicensees prior to execution of the particular Sublicense in accordance with the schedule below. As used in the preceding sentence, the term "License Fees" means fees, consideration or anything else of value received by Licensee for license of rights to the Licensed Products, Patent Rights, and Licensed Processes, excluding Running Royalties paid to Licensee and remitted to UARF pursuant to 4.1(c) hereof with respect to sublicensee's Net Sales.

Milestone Has Been Achieved at the	Sublicense Consideration Percentage
Date of Execution of the Sublicensee	
Milestone 1	40%
Milestone 2	35%
Milestone 3	30%

4.6. Royalty and Fee payments shall be paid in United States dollars in Akron, Ohio or at such other place as UARF may reasonably designate consistent with the laws and regulations controlling in any foreign country. If any currency conversion shall be required in connection with the payment of Royalties or Fees hereunder, such conversion shall be made by using the exchange rate prevailing at the Chase Manhattan Bank (N.A.) on the last business day of the calendar semi-annual reporting period to which such royalty payments relate.

# ARTICLE V. REPORTS AND RECORDS

- 5.9. Licensee shall keep full, true and accurate books of account containing all particulars that may be necessary for the purpose of showing the amounts payable to UARF hereunder, and said books and the supporting data shall be open at all reasonable times for five (5) years following the end of the calendar year to which they pertain, to the inspection of UARF or its agents for the purpose of verifying Licensee's Royalty and Fee statement or compliance in other respects with this Agreement.
- 5.10. Licensee, within sixty (60) days after June 30, and December 31, of each year, shall deliver to UARF true and accurate reports, giving such particulars of the business conducted by Licensee and its sublicensees during the preceding six-month period under this Agreement as shall be pertinent to a royalty accounting hereunder, including an accounting for Licensed Processes used and Licensed Products and the billings, deductions and royalties due with respect thereto.
- 5.11. With each such report submitted, Licensee shall pay to UARF the Royalties and Fees due and payable under this Agreement. If no Royalties or Fees shall be due, Licensee shall so report.
- 5.12. The payments set forth in this Agreement shall, if overdue, bear interest until payment at a per annum rate of the prime rate as reported by Chase Manhattan Bank, N.A. plus four percent (4%). The payment of such interest shall not foreclose UARF from exercising any other rights it may have as a consequence of the lateness of the payment.

#### **ARTICLE VI. PATENT PROSECUTION**

6.5. UARF shall be responsible for and ensure the prompt issuance of the Patent Rights and that such Patent Rights shall be maintained during the term of this Agreement in the

Territory. UARF shall also be responsible for obtaining such other available Patent Rights protection as Licensee may request at Licensee's sole expense. Licensee shall reimburse UARF for past costs incurred by UARF and UA with respect to all Patent Rights in the Territory, to be paid in full within 30 days of the effective date of this Agreement and thereafter as such costs are incurred.

6.6. If Licensee declines to seek protection in any country in the Territory, or shall at any time decide to discontinue prosecution or maintenance of any patent or patent application filed in any country in the Territory, Licensee agrees to give UARF a minimum of thirty (30) days notice. UARF at its sole discretion and expense, reserves the right to file, issue and/or maintain such patent applications and patents and Licensee will have no further rights with respect thereto.

#### **ARTICLE VII. INFRINGEMENT**

- 7.13. The parties shall inform each other promptly, in writing, of any alleged infringement of the Patent Rights by a third party, and any available evidence thereof.
- 7.14. During the term of this Agreement, Licensee shall have the right, subject only to approval not unreasonably withheld of UARF, but shall not be obligated to prosecute at its own expense any such infringements of the Patent Rights and, in furtherance of such right, UARF hereby agrees that Licensee may join UARF as a party plaintiff in any such suit, without expense to UARF. The total cost of any such infringement action except as provided in Paragraph 7.4. hereof, commenced or defended solely by Licensee shall be borne by Licensee and Licensee shall keep any recovery including damages for past infringement derived therefrom, provided, that Licensee, after deduction of its reasonable costs expended in pursuit of such infringement, shall remit to UARF a Twenty-five percent (25%) of said recovery. No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without UARF's consent, which consent shall not unreasonably be withheld.
- 7.15. If within six (6) months after having been notified of any alleged infringement, Licensee shall have been unsuccessful in persuading the alleged infringer to desist and shall not have brought and shall not be diligently prosecuting an infringement action, or if Licensee shall notify UARF at any time prior thereto of its intention not to bring suit against any alleged infringer, then, and in those events only, <u>UARF shall have the right</u>, but shall not be obligated, to prosecute at its own expense any infringement of the Patent Rights, and UARF may, for such purposes, use the name of Licensee as party plaintiff.
- 7.16. In the event that Licensee shall undertake the enforcement and/or defense of the Patent Rights by litigation, Licensee may withhold up to fifty percent (50%) of the royalties otherwise thereafter due UARF hereunder and apply the same toward reimbursement of up to fifty percent (50%) of its out-of-pocket expenses, including reasonable attorneys' fees, in connection therewith. The foregoing withholding provision is applicable only to Licensee and not to any successor to Licensee's interests. Any recovery by Licensee of damages for past infringement in any such suit shall be applied first toward reimbursement of UARF for any royalties past due or withheld and applied pursuant to this Article VII, and next in satisfaction of any unreimbursed expenses and legal fees of Licensee relating to the suit. Licensee shall keep the balance remaining from any such recovery subject to the proviso set forth in Article 7.2 above.
- 7.17. In any infringement suit as either party may institute to enforce the Patent Rights pursuant to this Agreement, the other party hereto shall, at the request and expense of the party initiating such suit, cooperate in all respects and, to the extent possible, have its

- employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like.
- 7.18. UARF warrants and represents that it has the lawful right to grant the license provided in this Agreement and that it has not granted rights or licenses in derogation of this Agreement. UARF agrees that during the term of this Agreement, or any license granted hereunder, UARF shall not enter into any other agreements that conflict with the rights or obligations provided hereunder, including any rights and obligations that survive termination of this Agreement.

# **ARTICLE VIII. PRODUCT LIABILITY**

- 8.5. Licensee shall, at all times during the term of this Agreement and thereafter, indemnify, defend and hold UARF, the University and their trustees, officers, employees and affiliates, harmless against all claims and expenses, including legal expenses and reasonable attorneys' fees, arising out of the death of or injury to any person or persons or out of any damage to property and against any other claim, proceeding, demand, expense and liability of any kind whatsoever, resulting from the Licensee's, Licensee's Affiliated Companies, or any of its sublicensee's production, manufacture, sale, use (both experimental and consumer), lease, consumption or advertisement of the Licensed Product(s) and/or Licensed Process(es) or arising from any obligation of the Licensee hereunder.
- 8.6. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, UARF MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND VALIDITY OF PATENT RIGHTS CLAIMS, ISSUED OR PENDING.

# **ARTICLE IX. EXPORT CONTROLS**

9.1. It is understood that UARF is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the Export Administration Act of 1979), and that its obligations hereunder are contingent on compliance with applicable United States export laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by Licensee that Licensee shall not export data or commodities to certain foreign countries without prior approval of such agency. UARF neither represents that a license shall not be required nor that, if required, it shall be issued.

# **ARTICLE X. NON-USE OF NAMES**

10.1. Licensee shall not use the names of UARF, the University of Akron nor of any of its employees, nor any adaptation thereof, in any advertising, promotional or sales literature without prior written consent obtained from UARF in each case, except that Licensee may state that it is licensed by UARF under one or more of the patents and/or applications comprising the Patent Rights.

## **ARTICLE XI. ASSIGNMENT**

11.3. This Agreement is not assignable except that Licensee may assign this Agreement in connection with any merger, consolidation, sale of all or substantially all of its assets or equity, or sale of a controlling interest in Licensee.

# **ARTICLE XII. ARBITRATION**

- 12.5. Any and all claims, disputes or controversies arising under, out of, or in connection with this Agreement, including any dispute relating to patent validity or infringement, which have not been resolved by good faith negotiations between the parties, shall be resolved by final and binding arbitration in Akron, Ohio under the rules of the American Arbitration Association, or the Patent Arbitration Rules if applicable, then obtaining. The arbitrators shall have no power to add to, subtract from or modify any of the terms or conditions of this Agreement. Any award rendered in such arbitration may be enforced by either party in either the courts of the State of Ohio or in the United States District Court for the Northern District of Ohio, to whose jurisdiction for such purposes UARF and Licensee each hereby irrevocably consents and submits.
- 12.6. Notwithstanding the foregoing, nothing in this Article shall be construed to waive any rights or timely performance of any obligations existing under this Agreement.

#### **ARTICLE XIII. TERMINATION**

- 13.11. UARF shall have the right to terminate this Agreement at any time upon notice to Licensee in the event either (a) If Licensee shall file in any court, pursuant to any statute either of the United States or any state, a petition in bankruptcy or insolvency or for the appointment of a receiver or trustee of all or substantially all of Licensee' property, or if Licensee shall make an assignment for the benefit of creditors, or if Licensee shall commit any other affirmative act of insolvency; or (b) if there shall be filed against Licensee in any court, pursuant to any statute either of the United States or any state, an involuntary petition in bankruptcy or insolvency or for reorganization, or if there shall be involuntarily appointed a receiver or trustee of all or substantially all of Licensee's property, unless such petition or appointment is set aside or withdrawn or ceases to be in effect within one hundred twenty (120) days of the date of the filing or the appointment.
- 13.12. Should Licensee fail to pay UARF royalties due and payable hereunder, UARF shall have the right to terminate this Agreement on thirty (30) days' notice, unless Licensee shall pay UARF within the thirty (30) day period, all such royalties and interest due and payable. Upon the expiration of the thirty (30) day period, if Licensee shall not have paid all such royalties and interest due and payable, the rights, privileges and license granted hereunder shall terminate.
- 13.13. Upon any material breach or default of this Agreement by Licensee, other than those occurrences set out in Paragraphs 13.1. and 13.2. hereinabove, which shall always take precedence in that order over any material breach or default referred to in this Paragraph 13.3., UARF shall have the right to terminate this Agreement and the rights, privileges and license granted hereunder by thirty (30) days' notice to Licensee. Such termination shall become effective unless Licensee shall have cured any such breach or default prior to the expiration of the thirty (30) day period.
- 13.14. Licensee shall have the right to terminate this Agreement at any time on thirty (30) days' notice to UARF, and upon payment of all amounts due UARF through the effective date of the termination.

13.15. Upon termination of this Agreement for any reason, nothing herein shall be construed to release either party from any obligation that matured prior to the effective date of such termination. Licensee may, however, after the effective date of such termination, sell all Licensed Products, and complete Licensed Products in the process of manufacture at the time of such termination and sell the same, provided that Licensee shall pay to UARF the royalties thereon as required by Article IV of this Agreement and shall submit the reports required by Article V. hereof on the sales of Licensed Products.

## ARTICLE XIV. PAYMENTS, NOTICES AND OTHER COMMUNICATIONS

14.1. Any payment, notice or other communication pursuant to this Agreement shall be sufficiently made or given on the date of mailing if sent to such party by Certified First Class Mail, Postage Prepaid, addressed to it at its address below or as it shall designate by written notice given to the other party:

In the case of UARF:	In the case of Licensee:
University of Akron Research Foundation	
Attention: Business Manager	
170 University Circle	
Akron OH 44325-2103	

## ARTICLE XV. MISCELLANEOUS PROVISIONS

- 15.11. This Agreement shall be construed, governed, interpreted and applied in accordance with the laws of the State of Ohio, U.S.A., except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent was granted.
- 15.12. The parties hereto acknowledge that this Agreement sets forth the entire agreement and understanding, and supersedes and makes null and void any and all prior understandings and agreements, of the parties hereto as to the subject matter hereof, and shall not be subject to any change or modification except by the execution of a written instrument subscribed to by the parties hereto.
- 15.13. The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.
- 15.14. Licensee agrees to mark the Licensed Products sold in the United States with all applicable United States patent numbers. All Licensed Products shipped to or sold in other countries shall be marked in such a manner as to conform to the patent laws and practice of the country of manufacture or sale.
- 15.15. The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals and fully executed this Agreement

University of Akron Research Foundation	Licensee
Ву	_ By
Name	Name
Title	_ Title
Date	_ Date
Acknowledged and Agreed to:	
Inventor	University of Akron