



University of Alaska Fairbanks Research Foundation:

A tool for utilizing university intellectual property for economic development and  
managing risk

Prepared by

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This report has been prepared by Keith Jones PhD of Kijani at the request of Dan White PhD, Associate Vice Chancellor, Research, Intellectual Property & Commercialization at the University of Alaska Fairbanks (the University). The intention of this document is to share best practices and practical recommendations for commercialization of intellectual property created at the University. In particular, issues around the mechanism of start-up business creation by faculty, staff and students are noted. Management of many of these issues can be solved by creation of a Research Foundation. A Research foundation can bear the burden of problems that are difficult to manage within the University and isolate the university from issues that impose unacceptable risk to the University and therefore cannot be handled adequately within the University. I am not a lawyer and all advice and recommendations are given from my 12 years experience in university technology transfer.

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This report and recommendation builds from the memorandum “Memorandum regarding the Management of Conflicts of Interest for Intellectual Property Dealings at the University of Alaska.”, prepared by Adam Krynicky JD dated 6th January 2012, where Adam explains the conflict of interest issue. This report will expand on issues other than conflict of interest.

# Why

One of the most important mechanisms of transferring knowledge out of an institute of higher education is through creation of start-up companies. In 2010 over 600 companies were formed by US universities. Google, Netscape, Genentech, Hewlett Packard, Polaroid, Lycos, Sun Microsystems, Silicon Graphics, Chiron, Amgen, Regeneron and Cisco Systems are all examples of university startups. Whilst “home-run” successes are unusual especially outside of major technology centers like Silicon Valley there are many examples of companies formed that have significant impact in smaller communities. An illustrative example is Schweitzer Engineering Laboratories, Inc., (SEL) in the small, remote city of Pullman, Washington. SEL is a faculty lead start-up company that has thrived. SEL is a world leader in its industry and employs over 800 people, many in locally. Such start-up activity is difficult and time consuming for the University but is a rewarding and necessary activity for a relevant university.

Creation of successful start-ups by the University will result in significant positive feedback to the University, Fairbanks and the State of Alaska. The resulting local economic development will produce income for the University but more importantly it will create well paying jobs that will employ university graduates and others from the community. A vibrant start-up culture will also attract or, at least, be a positive factor in hiring of bright, entrepreneurial faculty.

There is risk associated with such start-up activity. Newly formed companies usually do not have cash on hand that is available for licensing intellectual property and know how from the university. It is common for a new company to offer shares in itself to the university in lieu of paying an up front fee and for reduced royalties on sales. Accepting equity in lieu of cash payment is of advantage to the university as by not taking cash it increases the likelihood of the company succeeding and the equity becoming very valuable. Given that taking equity is a recommended course of action it is unfortunate that it is difficult for State Universities to hold equity in commercial entities for a couple of reasons. In many, especially western, states it is not possible for a state entity to hold equity in private companies. The prime reason that state universities form research foundations to hold equity and be the active party in licenses to to insulate the university from the risk inherent in any private business transactions.

A second advantage of setting up a University of Alaska Fairbanks - Research Foundation (UAF-RF) is to isolate the University from risk associated with start-up activity and licensing. While the risks of lawsuit and potential significant loss may not be much greater than the risks associated with higher education they are very different and as such need a different structure to assess and act in the presence of the different risk. UAF-RF with a business savvy board of directors will be able to assess business risk and act in a business appropriate manner that would be difficult for a University to achieve.

Another advantage is the UAF-RF with its business savvy board and flat management / decision making structure will be able to make decisions at the speed of business. Universities sometimes find it difficult to make quick decisions especially outside of the university's core competencies.

There are several other ways a well managed UAF-RF can support the University , such as raising and managing seed funds, facilitating research collaboration with industry and others. Such programs do not need to be put into action immediately but a structure should be put in place to allow implementation when appropriate.

## What

The usual implementation of a Research Foundation is a not for profit corporation which are often referred to by the IRS designation 501(c)(3) corporation. Creation of a 501(c)(3) corporation involves an application process to the IRS. My recent experience in setting up a new 501(c)(3) corporation is that it takes 3 to 6 months and about \$6000 for an outside lawyer to prepare an application and respond to the predictable initial reject by the IRS.

Once set up the new 501(c)(3) corporation is run by an independent board of directors. The board and directors are similar in roles and responsibility to the board and directors of for profit companies. One of their key responsibilities is selection of an Executive Director (this is the title given to the CEO in 501(c)(3) corporations), who manages the corporation and makes decisions on day to day activity. The Executive Director will generally have significant freedom in how the corporation is run, with the board of directors maintaining overall control. Given the limited budget available the UAF-F will be staffed, including the Executive Director, by employees of the University on *quid pro quo* as the service provided by the UAF-RF resulting in income to the University.

## Who

The structure of the board of directors is important to maintain the independence of the UAF-RF but give all stakeholders an appropriate say in the proceedings. In general the a smaller board is more manageable and better able to make timely decisions and give relevant advice to the executive director. I would propose that a board of 10 might be sufficient to include all stakeholder but be of a manageable size:

Two board members from management of the university, Chancellor or designee, Vice Chancellor for Research or designee Appointed by Chancellor

Two Regents, appointed by Chancellor

Two faculty members, appointed by faculty senate (perhaps add a staff member)

Four community members, from the wider community, Fairbanks, Alaska, local and or state government (non elected) possibly a native corporation representation. Also experts on start-up activity and university commercialization.

The numbers of each of these stake holder groups can be varied to get a good balance of interest but leaving ultimate control out of the university's hands. In most cases around the country the boards of directors of research foundations are volunteer but given Fairbanks' isolation travel support may need to be found to bring together a valuable board.

The executive director will be a university employee involved in technology commercialization and knowledgeable of the process. The executive director will represent the UAF-RF for only a small percentage of their time. Administrative support will be given by employees of the university.

## When

To calibrate the need it may be useful to learn that many land-grant peer institutions formed Research Foundations in mid 1900's with University of Wisconsin leading the way in 1929 and many other forming in '39 and '40. Many state universities have research foundations to manage research commercialization, with both Washington Universities use research foundations. The Oregon schools have taken a different approach as they worked with the legislators to take a vote to the citizens of Oregon to amend the state constitution. Oregon schools can now directly hold equity. There are many drawback to this approach.

## Implementation

There are several sets of documents that need to be negotiated and agreements reached. The Articles of incorporation and the by laws of the UAF-RF can be prepared by an attorney competent in the setting up of 501 (c) (3) corporations.

The other agreement that will need to be negotiated will be between between UAF-RF and the university. This agreement will describe in detail the relationship between the two entities. The University will use lawyers as part of its negotiation so UAF-RF will need to be represented perhaps Adam Krynicki with his qualifications could represent UAF-RF.

Issues to be negotiated include:

- University responsibilities, supplying staff, support, office space, transfer of ownership of IP for UAF-RF to be able to enter license agreements (if desired), when and how equity is transferred to UAF-RF

- UAF-RF responsibilities, holding and management of equity, exit policies for equity, distribution of proceeds to the university for distribution by policy or direct application of the university distribution ratios. What percentage of the income is held by and to the benefit of the UAF-RF?

The two lists of responsibilities need to balance to the satisfaction of both parties for a *quid pro quo* to be in place.

This list could be longer if the university plans on using the UAF-RF for other than holding equity at some time in the future. It may be worth documenting other possible responsibilities at this point rather than having to reopen the negotiation at a later time. Nothing other than equity holding needs be authorized or implemented but having agreement on how to move forward could be valuable and a time saver in the future.

## Other

There are two other processes that the university could put in place that would streamline and enable university start-ups. One is a clear and transparent conflict of interest management approval process that faculty and staff can undergo. Absence of a university approved conflict of interest plan should give any faculty pause before embarking on working to create a start-up.

The other very helpful process is a documented and implemented system to allow “rental” of university space and resources. University start-ups are almost always cash poor and allowance of full cost rental of lab space, specialist equipment etc will enable many more new business to be born and survive the very early stages of development.