Practice Statement:

Procedures for Start-up Companies Based on University Licensed Technology

I. Purpose of this Practice Statement

The University of Arizona is leading vast change in technology commercialization and related activities for the purpose of realizing substantially greater social and economic outcomes from its extensive research enterprise. Tech Launch Arizona (TLA) was initiated in September 2012 to deliver on the University’s new vision for technology commercialization. In this role, TLA has developed a comprehensive roadmap, including the identification of processes and procedures that can be improved or changed to better enable commercialization of University intellectual property (IP). This procedure document focuses on one central component of the technology advancement landscape at the UA: Formation Procedures for Start-ups. The document describes conditions surrounding start-up creation and licensing, what is being changed, and why (relevant policy and regulations that impact procedures, which are summarized at the end of this document). This document also provides a snapshot of best practices and will describe the UA’s procedures going forward. Importantly, it clearly demonstrates that the creation of a productive start-up environment is the result of deliberate, supportive policy and disciplined practice.

II. Nature of the Problem

The University of Arizona (UA) has underperformed in technology commercialization relative to peer research universities. For many years, programs, structure, and even outcome measures have essentially created barriers for promising IP to move to the market and realize social and economic potential. At the same time, UA has experienced highly successful research activity and until recently did not need to focus on the start-up potential of technology inventions to enhance its research base, to attract and retain top research talent, or to win major grants and awards. Given recent economic uncertainty, increased competition for federal research funding, and the keen desire to see their research be put to practical application, some UA faculty researchers have increased their focus, energy, and time on commercialization activities. TLA has stepped into the breach in order to close the gap between entrepreneurial interest and the heretofore-inadequate University response.

III. The Previous Approach

In the previous resource-constrained technology commercialization environment, UA practiced a passive methodology, essentially a “pass it to the faculty” approach. In this practice, inventors who had an intense passion to see their invention mature into products would start a company (with little or no help from the University), and the University would license the IP to the start-up. These fledgling companies often lacked an experienced and effective management team, and consequently typically had extreme difficulty securing capital for patent and other early stage development costs. Because these activities are outside of the expertise of most researchers, passion was tempered by capacity and relatively few attempted the process. For those who did, few realized significant or sustained success. In addition to loss of important technological advances,
faculty, administrators, and regional business leaders involved in the process held little confidence in the UA’s approach to start-ups and their licensing requirements. The spillover of this has in turn impacted the observable start-up culture and resulted in diminished frequency of entrepreneurial activity.

IV. Alternative and Progressive Practices

U.S. universities have responded to the challenge of technology commercialization in a variety of ways. Consistently, however, the start-up creation practice in the most progressive schools is evident in a definable ecosystem with a range of cooperative supportive activities, enabled by policy and connected to the academic mission of the university. Characteristics of the most successful start-up licensing environments include:

• Clarity of process, expectations, and resources;
• High quality technology assessment and marketing functions;
• Dedicated service-oriented personnel focused on the creation and nurturing of viable businesses with adequate management and business planning to secure initial and subsequent financing;
• Policy and process that engages business community;
• Assistance provided by students seeking experiential learning opportunities;
• Access to management-team level leadership;
• Policies designed to advance commercial potential while protecting the University and investigator reputational position related to research compliance regulations;
• Materials and resources to ease start up licensing process (guidebooks, handbooks, workshops, FAQs, dedicated faculty resources, etc.);
• Formal relationships with incubators and university affiliated local, regional and national venture development services.

V. The Tech Launch Arizona Best Practice

Even given difficulties of overcoming past practices and a challenging early-stage financial environment, significant interest and commitment to create an active, productive, and reliable start-up environment clearly now exists at the University of Arizona. After taking “time out” to reengineer practices, Tech Launch Arizona has begun to deploy these approaches in its commercialization and licensing practice, renewed UA’s commitment and resources, and demonstrated a true desire to work with inventors as partners in the commercialization process. It should be noted that not all faculty inventions are suitable as the technological foundation of a start-up company. Many, in fact most, inventions are more suitable for licensing to an ongoing or operating company. TLA will work with the inventor to determine which option is best for the particular technological situation and seek to transfer the technology to the right company in the marketplace.

Examples of TLA services are outlined in the phase descriptions below. Importantly, TLA will not compromise inventing faculty or innovative technologies by premature licensing. Technology will be licensed when a viable company is in place. The continuum of services offered by TLA is specifically designed to prepare technology opportunities in this manner. In short, technologies will be properly protected and the right teams will be engaged to offer the best chance for venture success. Special attention is given to the conflict of interest (COI)
and conflict of commitment (COC) issues, including access to clear information on procedures and status. COI and COC issues and procedures are discussed in more detail in a separate procedures document.
VI. Licensing Procedures for Start-ups

Items 1) through 6) of the figure below represent the start-up process and are described below.

1) Building Productive Relationships and a Supportive Culture

- University Faculty Invention and Discovery
- Invention Disclosure
- 2) Technology Assessment
- License Technology to Existing Company
- 3) Start-up Determination
- 4) No-shop/Standstill Phase
  - Patent work by outside counsel
  - Market assessment
  - Domain Expert Network
  - Determine commercial potential
  - Proof of Concept Funding
  - Enabling Disclosure
  - COI and management
- 5) Option Agreement Phase
  - Ongoing patent work
  - Business plan summary
  - Management team organization
  - Identify qualified business driver
  - Capitalization sheet
  - Negotiate license terms
- 6) Conversion/License and Investment/Launch Phase
  - Capital network
  - Industry relationships
  - Talent access

1) Building Productive Relationships and a Supportive Culture

The licensing process for start-ups formally begins at the point of invention and disclosure, and spans several phase-specific activities. However, well-formed, ongoing relationships and disciplined business practice between TLA staff, inventors, and research groups also positively impact the start-up license process. These relationships begin prior to disclosure. College-specific licensing managers who are embedded in their colleges primarily are at the nexus of these relationships, which are strengthened through a wide range of TLA interactions, programs, and people.

2) Technology Assessment

Once an invention or discovery is made, it is disclosed to Tech Transfer Arizona (TTA) by the inventor(s). This disclosure triggers an initial technology assessment by an assigned TTA Licensing Manager. In this assessment, the Licensing Manager gathers information including a snapshot of the technology, confidentiality status, IP considerations, patent search results, stage of development, potential commercial applications, market landscape, potential licensees and partners, creates a non-confidential marketing summary, and determines the need for outside market analysis. For more detail regarding the disclosure,
3) Start-up Determination

If, based on technology assessments and discussions with the inventor(s), it is determined that a start-up is the best pathway for a technology, the sequence of activities typically encompasses multiple phases, possibly including any or all of the following: a No-shop/Standstill phase; Option Agreement phase; and Conversion/License and Investment/Launch phase. These phases are carried out in partnership with the inventor(s) and are guided and supported by various TLA offices and functions, including Tech Transfer Arizona, Wheelhouse Arizona, and the TLA marketing staff. Importantly, this work is enabled by formal policy and specific allocation of financial and intellectual resources.

4) No-shop/Standstill Phase

The purpose of the No-shop period is to enable the inventor(s) to explore the commercial potential of the invention/discovery, solve specific technical hurdles, and generate decision support regarding a university start-up based on the IP. During this time, the UA will not market the IP to outside organizations and will support the examination of the commercial potential. TLA resources and support include:

- Financial support for patent work including management of application process to optimize patent claims with external legal counsel (identified in partnership with inventor(s));
- Proof of Concept funding to validate various commercial expectations of technologies;
- TLA-organized technology-specific group of domain experts, drawn from related-industries, markets, and scientific fields, to explore and knowledgeably advise business roadmap and to assist in building an optimal management team;
- Targeted marketing assistance;
- Completing documentation and approval process for all inventor(s) and other employees with a substantial interest in the start-up company, assuring that each has fulfilled university conflict of interest and enabling disclosure requirements. (Conflict of interest and management plan development and approval will be eased through the development and adoption of institution “Conflict of Interest and Commitment Management Plan Checklist”. In this checklist, potential types of conflict of interest and commitment are articulated alongside appropriate management plans for each. In this menu style approach, inventing faculty and UA personnel can discuss faculty goals and options with clarity of implications and responsibilities associated with each.)

5) Option Agreement Phase

If prior to or at the end of the No-shop period, the inventor(s) and the UA have sufficient understanding and confidence in the commercial potential to proceed with a start-up, the UA and the new company, or significant participants, may enter into an Option Agreement. During the Option Agreement phase, TLA will work with the company participants to complete the technical aspects of the commercialization plan, including: Ongoing patent work; Expanding or diversifying domain expertise and team formation to more deeply understand the potential of the technology asset and ensure that highly qualified business leaders are engaged in the commercialization process; Confirming the Conflict of Interest and Management Plan; Ongoing engagement with external legal expertise; Access to resources to augment or facilitate business planning related activities; Working with the company participants on the terms of the license agreement; Finalize necessary requirements to execute the license:

a) A summary business plan that describes the company's technology commercialization strategy,
including product development plans and timelines, marketing strategies, financing requirements and plans for obtaining necessary financing, as deemed reasonably suitable by university;

b) Identification of a qualified business driver (executive leadership) who possesses domain experience relevant for executing the business plan;

c) A capitalization table for the company, reasonably acceptable to university, showing all owners and grantees and their respective percentages and vesting schedules for all issued shares in the company and outstanding warrants and options;

d) Copies of company documents relevant to equity ownership in company, such as shareholder agreements, bylaws and operating agreements;

e) Negotiated license agreement.

6) Conversion/License and Investment/Launch Phase

Once conversion requirements are met to the satisfaction of the UA, the license can be executed. A license will be to the start-up company, not individuals, with the appropriate signature (company officer) and reasonable, negotiated fees and royalty obligations. When the technology has been successfully licensed to a company with promise of sustained success, it has the documents, plan, and leaders in place to secure investment and launch. At this time, TLA may continue to participate in the technology commercialization through investment contacts and launch mentoring through the Arizona Center for Innovation (AzCI). This may occur on site at AzCI as client-company, or through non-resident service offerings. With trust and partnership through the start-up license process, the ability to build on the potential of a start up in the community and / or with other business opportunities and as part of the growing TLA network.

VII. Policy and Regulatory Considerations

Since the mid 2000’s, several factors influenced the start-up licensing conditions at the UA. These include federal guidelines, Arizona law, Arizona Board of Regents Policy:

Federal

1) As a prime funding source for university research from which technology start ups may emanate, federal policy both requires and gives authority to the University to ensure that the products and outcomes of federally funded research be made available to society. Specifically, the Bayh Dole Act, which decentralized control of federally funded inventions, vests the responsibility and authority to commercialize inventions with the institution or company receiving a grant. It also establishes certain responsibilities to the government, the inventor, and the public. These requirements significantly influence the University’s license procedures to both existing external firms and to start-ups. Major provisions of the Act require that the University:

a) Grant licenses to the patents rather than assign their title to them;

b) Disclose the government’s interest in patent applications and notify the government before abandoning any patent application;

c) Share the income they received with the inventors—how much to share is at the discretion of the institution;

d) Use any residual income retained by the institution for research and education;
e) Grant a royalty-free non-exclusive license to U.S. Government for its own use;

f) Require licensees to manufacture products in the U.S. that were to be sold in the U.S.;

g) Give preference to small businesses;

h) The U.S. government retains the right to grant a compulsory license in the public interest if the invention was not being practiced;

i) A subject invention is defined as “any invention of the contractor that is conceived or first actually reduced to practice in the performance of work under a funding agreement.

2) Federal policy also requires that the University either remove or manage conflict of interest and potential conflict of interest conditions that may exist when University research faculty are involved in commercialization of technologies.

State of Arizona and Arizona Board of Regents (ABOR)

Arizona law through A.R.S 15-1635-01 currently requires any employee or officer of the university seeking to hold a substantial interest in an external company for the purpose of commercializing University technology must request permission by the Arizona Board of Regents (ABOR). ABOR review and granting of permission is based on conflict or potential conflict of interest and subsequent management plan.

Do you have questions about this IP Practice Statement or other issues around start-up formation?

Contact Wheelhouse Arizona.

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