Amended October 7, 2005

Iowa State University Research Foundation, Inc. (ISURF) Policy on Accepting Equity

ISURF exists to manage the intellectual property resulting from Iowa State University research for the benefit of the university. Management of the intellectual property is necessary to determine the appropriate methods of protection and transfer that will encourage the practical application of the results of university research for the benefit of the public good.

Technologies disclosed to the university's Office of Intellectual Property and Technology Transfer (OIPTT) are reviewed in consultation with ISURF and if appropriate, are offered to potential licensees, often during the early stages of developmental research. These early stage technologies typically require a considerable amount of further investment by the potential licensee in the area of continued technical and market research, product development, and possible regulatory approvals. Therefore, OIPTT and ISURF seek licensees able to demonstrate that they currently are adequately financed or that adequate financing will be available, and that they are willing to focus such resources on the developmental research necessary to advance the technology to a marketable condition. Further, OIPTT and ISURF must be satisfied that the licensee will be able to meet the market demand for the technology and will make an effort to establish a market for the technology.

ISURF generally seeks reimbursement of patenting costs or other intellectual property costs from the licensee as well as customary financial consideration to share in the income generated from the sale of products or services resulting from the use of ISURF's intellectual property. The resulting income provides an incentive to university inventors and authors to participate in the complex technology transfer process, funds further university research, and supports the operation of OIPTT and ISURF.

The combination of developmental costs and risk and uncertainty as to the potential value of the technology occasionally make it difficult for OIPTT and ISURF to find a licensee possessing both the requisite capabilities and willingness to assume such financial risks. Small or startup companies may find it particularly difficult to commit significant cash outlays for both developmental and licensing costs. Accordingly, taking equity as partial consideration in lieu of other cash consideration in a license provides a solution for ISURF to accommodate the needs of some of its licensees.

In addition, the development process required by the company to introduce a successful product on the market may result in a number of significant changes to the original technology licensed to the company. The final successful product could be changed so significantly that it no longer incorporates our technology, leaving us with no royalty income. A similar situation can occur in the case of patented technologies with long development or market time lines, which result in a few years, if any, of patent life to earn royalty income from a successful product. Consequently, taking equity prevents the situation in which ISURF would receive little, if any, royalty from licensed technology used to start a company.

The potential for conflict of interest may arise in many forms when ISURF enters into a license agreement. Because ISURF operates for the benefit of the university and income from ISURF activity is shared with the university and its employees as inventors or authors, the appearance of undue influence on the outcome of research or on a company's operations for the benefit of ISURF may negatively reflect on the university itself, thereby jeopardizing the reputation of the university's research and educational efforts. In the Association of American Universities' October, 2001 "Report on Individual and Institutional Financial Conflict of Interest," affiliate organizations are included in its identification of institutional parties who may have a relationship with or financial interest in a company which might give rise to an institutional conflict of interest.

ISURF, the university, university departments, and inventors or authors may all benefit from the financial rewards of a license by way of royalties or other fees if the product or service is commercially successful. Therefore, they have a financial interest in ensuring the success of the product. If the returns are in the form of royalties, there is a control, however. The market must buy the product or service and will judge it on its merits and not on ISURF's or the university's earlier acts. Holding equity, however, provides a larger potential for conflict of interest due to several reasons:

- Equity markets are not perfect. Speculators reacting to information such as research results may cause substantial changes in market value. This may occur before any product sales.
- Unlike royalties, owners of equity may cash in their shares prior to the product or service passing the market test of generating sales. This creates a situation where ISURF, the university, and the inventor may enhance their positions relative to other shareholders by having superior or "insider" information.
- ISURF, the university and the inventor or author must avoid even the appearance of manipulating stock prices through issuing or using information that may later prove incorrect.

Concerns with conflict of interest have grown in recent years due to the increased complexity of the interactions among foundations, universities, companies, governmental agencies and other entities. Federal agencies, professional associations, and the public have turned their attention to these concerns. Some questions on conflict of interest arise from activities of the individual and the opportunities an individual may have because of his or her position at ISURF, the university, a company, a position within the State of Iowa, or other position to influence ISURF's relationship with a company which would lead directly to the individual's personal gain, financial, political or otherwise. The individual potential conflicts of interest of university and ISURF employees is managed under the university's Conflicts of Interest and Commitment Policy and for ISURF members is managed under ISURF's Membership and Board of Directors Conflict of Interest Policy.

The purpose of this policy is to set forth the principles and procedures for ISURF to accept equity in a company as partial consideration for technology licensing-related transactions in appropriate circumstances which manages potential corporate financial conflicts of interest.

- 1. **Potential Conflicts of Interest**: Acceptance of an equity interest in a licensee does not conflict with the principles or polices of ISURF or the university, nor does it give rise to a conflict of interest. Conflicts or perceived conflicts may arise when a) the university inventors or authors have an equity interest in the licensee, or are working closely with both ISURF and the company with the objective of commercializing the technology, b) research funding is provided to the university by the company or by ISURF for further testing or development work of the licensed technology, c) ISURF appears to be preferentially transferring technologies to a company in which they own equity, d) ISURF 's influence over the disposition of its equity position is too great. Management of potential conflicts c) and d) requires ISURF to have a hands-off approach to the management of the equity and to manage the license in a business like manner similar to other licenses that it manages. To manage the potential conflict arising under a) and b) full disclosure of the potential conflict of interest must be made to the appropriate parties. Such disclosure and management shall be as follows:
 - 1.1 Once potential licensees have been identified, ISURF will inform inventors and authors that they must refrain from participating in the selection of a licensee if that inventor or author has a financial interest in any potential licensee.
 - 1.2 In those cases where ISURF determines that an equity position is appropriate under a license, ISURF must require that the inventors disclose any financial interest in the potential licensee. ISURF will provide this information to the university's Vice Provost for Research.
 - 1.3 ISURF must avoid the appearance of "pipelining" future technologies to a company in which ISURF holds an equity interest. New inventions not directly related to the original licensed technology for which equity was taken should be licensed to the company best able to develop them. Consequently, such inventions should be made available for licensing to appropriate companies and should not automatically be made exclusively available to companies in which ISURF has taken equity.
 - 1.4 When ISURF provides research support to the university for further development of a technology or when research support is included as part of the income under a potential license or option agreement in which ISURF will or expects to hold an equity interest, ISURF shall notify the university's Vice Provost for Research.
 - 1.5 ISURF shall require within its license agreement that when research support is received by the university from the licensee, whether as income under the license agreement or otherwise, and the research to be conducted involves the licensed technology, all inventions conceived or reduced to practice during the funded research and based on the research project will be disclosed to ISURF and the licensee to assure that inventorship issues are addressed by both parties.
 - 1.6 During the time that the company in which ISURF holds an equity interest is still privately held, ISURF employees, members, board of director members, and employees of the university's Office of Intellectual Property and Technology Transfer whose salaries are paid by ISURF may not invest personally or own stock in the company.
- 2. **Accepting Equity**: ISURF management will select licensees and enter into licenses with companies in which it believes will be good candidates for holding equity based on the following provisions:
 - 2.1 When the technology is best suited for a small entrepreneurial company that is able to bring the invention to the marketplace (i.e. the company has the means to develop,

- market, and deliver the invention to the public in a timely manner), ISURF may choose to accept equity in that company, in partial lieu of cash, to facilitate the practical application of a technology for the general public benefit.
- 2.2 Equity shall mean shares of common or preferred stock, warrants, options, convertible instruments, units of a limited partnership, or any other instrument conveying ownership of economic interest in a corporation, limited partnership, limited liability company or other business entity.
- 2.3 ISURF management shall present its selection, reason for selecting the company and for taking equity, company's business plan and proposed deal structure to an equity review committee composed of ISURF Board and university representatives: ISURF's Treasurer (ISU's VP for Business and Finance), university's Director of Industry Relations, ISURF's Secretary (ISU's VP for Research and Advanced Studies), ISURF President and the ISURF Vice President. A majority approval by this committee is needed before ISURF can enter into a license agreement containing equity.
- 2.4 ISURF shall not hold a controlling interest in a company.
- 2.5 ISURF's relationship to a licensee in which it owns equity will be an arms-length relationship. ISURF will maintain the right to vote as shareholders but will not hold an active seat on the licensee's board nor become a board observer nor exercise any voting rights on board actions, regardless of the level of its equity interest.
- 2.6 ISURF's preference is not to invest cash in any start-up.
- 2.7 If a university employee inventor is involved with the company, the university's Conflict of Interest and Commitment Committee must have met with the inventor prior to ISURF entering into a license with equity.
- 2.8 All relationships with a licensee in the management of the license agreement in which ISURF has accepted equity shall be handled in a business-like manner. Decisions will not be made based on their impact on the equity, but based on sound business decisions and in a manner similar to the management of other license agreements in ISURF's portfolio.
- 3. **Equity Management**: When a decision is required with regard to equity, ISURF, through the review committee established in 2.3 and through a competitive bid process, shall find a management firm who is not affiliated with the university to manage the equity. All decisions and administrative actions concerning the management of the equity issued to ISURF by a licensee, including the decisions on when stocks will be converted to cash shall be made at the sole discretion of the management firm, shall be based upon sound business practice and publicly available information, and shall be consistent with the following guidelines:
 - 3.1 ISURF's equity interests should be transferred or sold when possible and distributed to ISURF. Any inventor distribution should be made by the equity management firm directly to the inventor or author if the inventor's or author's share has been managed by the equity management firm as provided in 4.2 below.
 - 3.2 ISURF shall advise the equity management firm if the distribution will go to ISURF only, or to ISURF and the inventor or author if the inventor's or author's share is to be distributed from ISURF's share. The equity management firm will consult with ISURF on the valuation, ISURF shall calculate the inventor or author's share and relay the amount along with the full name and address of the inventor or author.

- 3.3 If equity distribution is in the form of stock, the same procedures will be followed for the inventor's or author's shares as in 3.1 and 3.2
- 3.4 ISURF and its employees shall not share non-public information with the management firm.
- 3.5 The management firm shall not hold an active seat on the licensee's board.
- 4. **Equity Sharing and Distribution**: ISURF shall share equity with inventors, authors and the university's colleges in the amounts designated in ISURF's Patent Royalty Distribution Policy and based on the following provisions:
 - 4.1 The cost of managing the equity by the management firm will be deducted as expense from income prior to sharing the income as provided in ISURF's Patent Royalty Distribution Policy.
 - 4.2 ISURF shall consult with each inventor or author and advise the following:
 - 4.2.1 In general, it is preferable for the inventor's or author's share of equity to be managed with the total equity granted under the license and distributed at the time ISURF cashes out. However, the individual inventors or authors may request to receive their share issued directly to them from the licensee, if acceptable to licensee.
 - 4.2.2 Each inventor or author should seek personal legal counsel regarding the effects of directly accepting equity. Among the various issues that should be considered in determining his or her preference on how equity should be accepted are the following: the ability of each inventor to accept equity directly from a licensee in compliance with applicable laws and regulations; any personal tax liability to the inventor that may be triggered when equity is directly transferred to the inventor.
 - 4.2.3 If the inventor's or author's share of equity is accepted by ISURF, the management and disposition of such equity will be at the discretion of a third party equity management firm. The third party will make decisions regarding equity disposition based upon sound business judgment and publicly available information, and will coordinate with ISURF as necessary. The inventor's or author's sole right under these conditions will be the receipt of the appropriate share of such equity or its cash equivalent at such time and in such form as the third party shall deem appropriate. ISURF will have no obligation to the inventor or author to maximize the value of the shares on behalf of the inventor.
- 5. Application of this policy to the Ames Laboratory (DOE facility) is to the extent that there is no conflict with the obligations of the university under its management and operating contracts with the DOE.