CASE WESTERN RESERVE UNIVERSITY INTELLECTUAL PROPERTY POLICY

-- Adopted by the Board of Trustees on July 23, 2003--

PREAMBLE

Case Western Reserve University ("the University") is a privately financed institution devoted to teaching, research, and other scholarly activities benefiting the public. The University faculty, staff, and students, as part of their normal professional activities, conduct research that may be of significant benefit to the public and that merits development of its commercial potential. The University supports such research from its own resources; corporations, foundations and governmental entities also provide funding for such research ("External Funding"). The sponsors of External Funding impose a variety of contractual terms on the University in connection with their financial support, including requirements regarding disclosure of matters pertaining to the research supported by External Funding and allocation of the rights to inventions and discoveries produced by such research (collectively such inventions and discoveries are referred to herein as "applications"). These contractual terms are especially important in connection with those applications with commercial potential. This policy is therefore intended to provide an equitable and orderly procedure to promote the commercial development of applications while also maintaining compliance with the rights and duties associated with the External Funding supporting it. The further purpose of this Policy is to contribute to the promotion of a culture and spirit of innovation, creativity, imagination, dynamism, and scholarship that characterizes a research University.

1. INTELLECTUAL PROPERTY

For purposes of this policy, except as provided below, "Intellectual Property" includes any results having potential commercial value produced by University faculty, staff, and students in connection with activities funded by the University and/or by External Funding or using University employees, facilities, or equipment, including but not limited to any inventions, computer programs or other software, data bases, any information or material subject to copyright under the laws of the United States or any other government, trade secrets (as defined in the Ohio Uniform Trade Secrets Act) and knowhow related to inventions.

Notwithstanding the foregoing, Intellectual Property does *not* include books (including textbooks), articles, novels, poems, psychological and educational tests and measures, musical works, dramatic works including any accompanying music, pantomimes and choreographic works, pictorial, graphic and sculptural works, motion pictures, audio-visual works, and sound recordings, regardless of whether such exempt materials were

produced in connection with the use of University facilities, staff or equipment. This policy does not apply to educational software.

2. OBJECTIVES OF THE POLICY

A. To promote creative intellectual effort by University faculty, staff, and students for the purposes of developing the commercial value of Intellectual Property.

B. To establish principles for recognizing the rights of the creators of Intellectual Property, the sponsors of External Funding, and the University.

C. To provide means to determine the commercial potential of Intellectual Property and to promote the commercialization of such Intellectual Property for the benefit of its creators and of the University.

3. GENERAL PROVISIONS

The University owns title to Intellectual Property except as otherwise contractually provided, whether such contractual provisions are associated with External funding or otherwise. This ownership helps further the University's academic mission in that it promotes research, the dissemination of knowledge, and the well being of society in general. University ownership of Intellectual Property expedites commercialization, and ownership is often a condition of External Funding; indeed the Bayh-Dole Act requires it for research funded by Federal agencies. The benefits accruing to the University as a result of its ownership of Intellectual Property benefits its faculty by increasing the resources available to (1) promote the commercialization of Intellectual Property, thus providing royalties and other benefits to faculty and staff, and (2) advance the long-range development of departmental capabilities and of the University.

The University recognizes that if creative intellectual effort is to be fostered and stimulated, there must be a fair appraisal of rights to Intellectual Property and a funded mechanism for commercializing Intellectual Property. In order to recognize the interests of the appropriate parties, it is necessary that faculty, staff, and students who develop Intellectual Property during their association with the University, cooperate with the University in defining and securing the rights to such Intellectual Property and assist in the University's commercialization efforts as requested by the University. In order to achieve protection and commercialization of Intellectual Property, the creator shall provide the Vice President for Research and Technology Management or his or her representative with a statement disclosing the Intellectual Property and the circumstances under which the Intellectual Property was conceived with particular reference to (a) whether the project or program from which the Intellectual Property derived was financed in whole or in part by a grant or contract, and if so, the name of the funding entity, (b) whether the Intellectual Property falls within the creator's activities and responsibilities for the University, and (c) whether University funding, equipment, staff or physical

facilities were employed in the process of developing the Intellectual Property. This should be done as soon as the creator is aware of the novelty and potential value of the Intellectual Property.

The Vice President for Research and Technology Management, or his or her designee, shall make a decision whether or not the University elects to pursue the commercialization of the Intellectual Property and shall inform the creator or creators of the disposition of said Intellectual Property within 120 days of receiving all information necessary for a complete disclosure. In cases where the University elects to pursue commercialization of the Intellectual Property, the Office of Technology Transfer shall incur the costs of protecting (through patenting, trademark or copyright as necessary) and marketing the Intellectual Property to interested potential licensees. The Office of Technology Transfer is obligated to pursue commercialization expeditiously and in consultation with the creator(s). In cases where the University elects not to pursue commercialization of the Intellectual Property, subject to funding and governmental restrictions and in accordance with Sections 6 and 9 of this Policy, said Intellectual Property shall be released to the creators at their request, subject to the terms of Section 5, para. 2 below.

4. DISTRIBUTION OF RIGHTS

A. Intellectual Property may result from research falling generally into one or more of the following categories: (i) supported wholly or in part by University funding or use of University facilities, staff or equipment, (ii) financed wholly or in part by a government grant or contract; (iii) financed wholly or in part by an industrial corporation or other private source under contract or written agreement; or (iv) conducted wholly on the creator's own time, at the creator's expense and without use of University facilities, staff or equipment. Intellectual Property arising from research conducted wholly on the creator's time and at the creator's expense is not a product of university funding. In all categories other than category (iv), all rights to the Intellectual Property have automatically been assigned to the University by reason of this Policy and the creators, whether staff, students, or faculty, shall be obligated to execute any documents necessary to reflect such assignment of all rights to Intellectual Property to the University and to participate as necessary and appropriate in the acquisition and protection of proprietary rights to the Intellectual Property.

B. The University is obligated to report to the appropriate government agency all Intellectual Property that has been derived from government funding in whole or in part for definition of the government's rights and interests. This definition can result in: (i) a release of the Intellectual Property to the University (also see Section 5), with the government retaining a non-exclusive, non-transferable, royalty-free license (i.e., the normal course); or (ii) the government acquiring and reserving to itself specific rights.

C. Rights with respect to Intellectual Property that is financed by industrial corporations or other private sources or that results from joint work with persons or agencies outside

the University are governed by the terms of contracts or agreements with those outside parties (also see Section 5). The responsible investigator is responsible for informing all persons working on the project of their rights and obligations under such contracts or agreements before initiation of the research.

D. The University assumes no right or responsibility with respect to Intellectual Property coming within clause A(iv) above. However, to be sure that there is no disagreement over whether Intellectual Property falls within that clause, for a creator to secure ownership rights with respect to such Intellectual Property, the creator must notify the Vice President for Research and Technology Management, or his or her designee, of the intended disposition of said Intellectual Property, and request and obtain a waiver of University ownership prior to engaging in any commercialization activities of such Intellectual Property, including application to obtain property rights through patenting, etc. If the creator and the University mutually agree, the creator may assign the Intellectual Property to the University and thus avail himself or herself of the commercialization services of the University. (Complete information on these services is available from the Vice President for Research and Technology Management.)

E. This policy applies to Post-doctoral scholars, Research Associates, Senior Research Associates, Research and Clinical Faculty, and Visiting Faculty and Scholars in the same way that it applies to Faculty.

5. DISPOSITION OF UNIVERSITY RIGHTS

Disclosures of Intellectual Property must be made by creators to the Vice President for Research and Technology Management or his or her designee. In all cases where rights to Intellectual Property reside with the University, the Vice President for Research and Technology Management or his or her designee shall decide, in consultation with the creator(s), whether the Intellectual Property shall be commercialized by or through the University (or through an external source acting as agent for the University) or offered for release to the creator(s).

When the Intellectual Property is offered for release to the creator(s), they must inform the Vice President for Research and Technology Management, or his or her designee, in writing if they wish to pursue commercialization of the Intellectual Property on their own. The University shall release the Intellectual Property to the creator(s), except in cases where one or more of the following conditions prohibits such release: 1) federal regulations governing the Intellectual Property prohibit such release; 2) release of the Intellectual Property in question would create an undue liability or risk for the University, due to the potentially dangerous or inappropriate way(s) in which the Intellectual Property could be used; 3) the Intellectual Property in question is not yet developed to a point where its commercialization potential can be determined or maximized. Irrespective of which alternative may be selected, wherever federal funding is involved in the development of the Intellectual Property, the U.S. government shall generally retain as a minimum the right to a royalty-free, non-exclusive, irrevocable license throughout the world under any patent which may eventually be issued, as well as the right to take back the Intellectual Property absent adequate commercial development.

6. MAXIMIZING COMMERCIAL POTENTIAL OF INTELLECTUAL PROPERTY

A viable technology transfer operation generates significant benefit to faculty, staff and students of a university. In addition to providing a mechanism for transfer of knowledge and discoveries from research to commerce, a technology transfer operation also increases researchers' exposure to commercial entities, thus increasing the potential for sponsored research. A world-class technology transfer operation helps the University to recruit and retain the best research talent. There is direct benefit derived from the license income and start-up companies created by technology transfer activities, in terms of income for creators and their departments, and job creation for the local community.

Start-ups of new technology-based business ventures are among the pathways for transferring University ideas to practical application and public benefit. Faculty participation in such business ventures is premised on the strong affirmation that a faculty member's primary loyalty and attention must be given to the role of teacher and scholar. Properly managed, however, appropriate participation in such ventures can provide a special channel of intellectual satisfaction for faculty members wishing to play a role in seeing their research results converted to practical products. Such ventures also provide the opportunity for financial rewards to participating faculty, their department or school, and the University, through equity and/or royalty participation in the start-up granted in return for license of Intellectual Property rights.

The Vice President for Research and Technology Management, or his or her designee, shall monitor all such start-up arrangements in consultation with the appropriate Department Chair or Division Head having administrative oversight over the faculty member involved in a startup, and the Management Center Dean and shall submit a written report annually of his or her findings to the Provost. In the event that the interested party (faculty member) involved is a Chair or Division Head, the Vice President for Research and Technology Management, or his or her designee, and the Management Center Dean shall select another administrator to consult with the Vice President for Research and Technology Management.

To expedite the flow of Intellectual Property into the stream of commerce and hence ensure maximum benefit to the public, the creators, and the University, the University shall invest in the establishment of its own commercialization capabilities and may also develop relationships with several licensing institutions, economic development centers, and other organizations to realize the commercial benefit of this Intellectual Property. The establishment of such an organization will be partially funded by proceeds derived from technology transfer activities, as outlined in Section 7.

7. DIVISION OF INCOME

Unless contractually agreed otherwise in advance, fifty percent (50%) of the Net Income received by the University in the form of royalty payments, or other earnings on the Intellectual Property, shall be given to the creators. "Net Income" as used here means the income which remains after deducting from gross income the expenses for external marketing, legal, intellectual property protection, travel, litigation, consulting payments and/or fees due to third parties as a result of their support of research or commercialization of the Intellectual Property, and other services and expenses directly related to the Intellectual Property in question or commercialization thereof. The deductions shall be reasonable and fair, and shall be properly disclosed on a periodic basis to the creator(s) and the relevant department chair and dean. In no event shall payments for research activities be deemed to be part of "Net Income" for purposes of distribution to creator(s).

When Net Income exceeds \$100,000, a fifteen percent (15%) administrative charge to defray the expenses of general operation and services of the Office of Technology Transfer shall be deducted and the remainder shall be divided equally between the University and the creator(s). Unless otherwise agreed in writing, the University's share of Net Income shall be divided equally between the University and the School of the creator(s). The allocation of Net Income between units within the School shall be specified in an agreement signed by the creator(s) and the Dean. This allocation remains the same if the creator(s) should leave the University.

If there should be a plurality of creators, that part of the income accruing to the creators shall be distributed among the creators eligible to receive a share of the proceeds under this policy as specified in the original invention disclosure forms used by the creators in their disclosure to the Office of Technology Transfer, or as specifically requested in writing by all the creators involved in that disclosure. In case of dispute among the creators, the allocation shall be determined by the Vice President for Research and Technology Management, who shall make the final decision.

Where Intellectual Property has been developed with federal grant support, the University and its researchers are bound by the terms of the grant agreement. Those terms supersede this Policy to the extent this Policy is inconsistent with them. If a grant agreement reduces the amount of earnings that can be shared with a creator, the percentage of gross proceeds contributed to the operation of the Technology Transfer Office shall also be adjusted on a pro rata basis.

The principle of sharing financial rewards of commercialization with the creators of Intellectual Property also applies when those rewards are in the form of equity participation in a company. However, it should be noted, because of the complexity of business start-up arrangements, the precise division of benefits will have to be negotiated on a case-by-case basis, particularly when faculty may have a continuing role in the company.

8. INTELLECTUAL PROPERTY CREATED BY STAFF WITHIN SCOPE OF EMPLOYMENT

Intellectual Property created by staff within the normal scope of their employment shall be owned by the University by virtue of the employment relationship and therefore shall not be subject to the division of income provisions of this Policy. Other Intellectual Property created by staff is subject to this Policy.

9. RELEASE TO CREATOR OF UNIVERSITY-OWNED INTELLECTUAL PROPERTY

In the event that the University releases Intellectual Property owned by the University to the creator(s), the University shall retain a perpetual, non-exclusive, non-transferable, world-wide, royalty free license to use said Intellectual Property for educational and research purposes of the University and to sublicense it for current or future non-commercial research in conjunction with the results of such research. The University may set requirements concerning such release as are appropriate, in the judgment of the Vice President for Research and Technology Management, to (i) provide for protection of the University's interests should creator seek to utilize University facilities thereafter in relation to the released Intellectual Property, (ii) preserve any rights of the sponsor, and (iii) protect the University from claims or costs arising from the use of the Intellectual Property after its release. In the case of software, this policy requires access by specified University personnel to the source code, and the University shall require each person to whom a disclosure is made to execute in advance a binding confidentiality agreement in favor of and enforceable by the creator.

10. INDIVIDUAL AGREEMENTS

Intellectual Property that is the subject of a specific agreement between the University and the creator(s) thereof shall be owned as provided in said agreement. Such agreements by the University and the creators are encouraged. Except where limited by external sponsorship agreements, creators and the University may negotiate individual agreements to govern ownership of Intellectual Property and any other matters, regardless of the applicability of any other provision hereof. The faculty and the University are encouraged to participate in unique agreements that promote reinvestment of royalties and receivables to further the research and educational activities of the University. In such cases, the University may match such commitments of the faculty from their portion of the benefits.

11. STUDENT MATERIALS

Regardless of use of University facilities, student coursework or other Intellectual Property shall belong to the student unless created (a) while student is acting as an employee of the University, (b) while student is engaged in research funded by the University or External Funding, or (c) as part of a class or other academic project involving a commercial entity's intellectual property, provided that it is announced at the commencement of the project that students will not have ownership of Intellectual Property created in conjunction with that project.

If faculty or teaching assistants, acting as advisors, assist in the creation of Intellectual Property and are therefore co-creators (with the student as creator), the student may choose to disclose the invention to the Vice President for Research and Technology Management, or his or her designee, and request the services of the Office of Technology Transfer in commercializing such inventions.

12. RESOLUTION OF DISPUTES

In the event there is a disagreement between the creator and the University regarding the interpretation of this policy or its application, the Faculty Senate Committee on Research or its designated resource group shall be consulted for its advice. Such advice must be requested in writing within 30 days of the event. This group shall consider all of the relevant facts concerning the development and reduction to practice of the Intellectual Property, and meet with the creator and/or avail itself of appropriate legal counsel or other expertise, such as mediation, as necessary. The committee shall make its recommendations on the disposition of the case to the President of the University who shall make the final decision.