

During the last two years, the work of Drs. Wolf and Bannister has resulted in two patentable inventions which OPI has patented: 1) a genetic fragment which codes for a protein which is a powerful stomach and muscle relaxant and 2) a high-yield method for manufacturing protein in B. Subtillus through recombinant DNA techniques. Further, the scientists' laboratories have also produced several biological "tools" - plasmids and clones - which OPI has elected not to patent. All of this technology can be of significant value to Medi-Systems' CalmidolTM project.

Drs. Wolf and Bannister have both run relatively large lab operations for the last several years and both have suffered from recent cuts in their NIH grants. Their initial discussions with Medi-Systems have stimulated their interest partially as a possible solution to their financial problems, but primarily because of their scientific interests in collaborating with industry on a major project which may lead to the practical application of their work.

Initial discussions between Medi-Systems' scientists and executives and Drs. Wolf and Bannister have resulted in a preliminary proposal for Medi-Systems to sponsor a five year project at OPI with a total budget of \$2.5 million; Medi-Systems will run an in-house collaborative project with an escalating budget starting at \$100,000/year. Further, Medi-Systems has employed Drs. Wolf and Bannister as consultants since January, 1982 and has offered them both options equalling 2% of the company's currently outstanding stock.

These initial discussions have moved to a more formal stage. Negotiators for Medi-Systems and OPI have met once to discuss the basics of a sponsored research agreement between the two institutions through which the work of Drs. Wolf and Bannister can be supported. At Medi-Systems' request, OPI has presented a first-draft agreement proposal. Drs. Wolf and Bannister have become convinced of the project's desirability and are now eager to proceed; they have in fact located three highly qualified post-doctoral scientists whose participation will materially accelerate their research efforts and have made informal commitments to hire them at the beginning of the summer of 1983.

Negotiators from both institutions are fully familiar with OPI's proposal and are scheduled to meet on January 30, 1983 to work out a final agreement.

SPONSORED RESEARCH AGREEMENT

between

MEDI-SYSTEMS

and

OMNI Polytechnical Institute

(OPI)

1. Scope of Work

MEDI-SYSTEMS grants to OPI and OPI accepts, a research grant to support investigations at OPI under the direction of Drs. John W. Wolf and Eric C. Bannister (hereinafter known as the Principal Investigators), as described in the attached Statement of Work (Schedule A).

2. Compensation

In consideration of OPI's exerting its best efforts to carry out the research described in Schedule A, MEDI-SYSTEMS will pay OPI the following amounts:

Year 1:	\$600,000
Year 2:	\$400,000
Year 3:	\$450,000
Year 4:	\$500,000
Year 5:	\$550,000

MEDI-SYSTEMS will pay OPI one half of each year's total at the beginning of that year and the remaining half six months after the beginning of each year. It is understood that funds for the direct costs of the research which are not used in a particular grant year may be used in subsequent years.

3. Period of Performance

Research under this Agreement will be performed during the period July 1, 1983 through June 30, 1988.

4. Designated Representatives

MEDI-SYSTEMS' Designated Representative shall be _____ or such other representative as MEDI-SYSTEMS may subsequently designate in writing. OPI's Principal Investigators shall be Drs. Wolf and Bannister.

5. Consultation with MEDI-SYSTEMS' Representatives

During the period of this Agreement, MEDI-SYSTEMS' representatives may consult informally with OPI's representatives regarding the project, both personally and by telephone. Access to work carried on in OPI laboratories in the course of these investigations shall be entirely under the control of OPI personnel and available on a reasonable basis.

6. Progress Reports

The Principal Investigators will make up to four oral reports each year as requested by MEDI-SYSTEMS' Designated Representative. At the conclusion of each year, the Principal Investigators shall submit to MEDI-SYSTEMS a written report summarizing the work. The Principal Investigators shall also submit a comprehensive final report within 120 days of termination of this Agreement.

7. Publicity

No press release or other written statements in connection with work performed under this Agreement intended for use in the public media, having or containing any reference to MEDI-SYSTEMS or OPI, shall be made by either party without approval of the other party. OPI however, shall have the right to acknowledge MEDI-SYSTEMS' support of the investigations under this Agreement in scientific publications and other scientific communications. In any other statements, the parties shall describe the scope and nature of their participation accurately and appropriately.

8. Publication

OPI and MEDI-SYSTEMS have the right to publish or otherwise publicly disclose information they have gained in the course of this Agreement, but each will give the others reasonable advance notice thereof. In order to avoid loss of patent rights as a result of public disclosure of patentable information, it is understood that reports of these investigations intended for publication will be made available to OPI and MEDI-SYSTEMS for review with respect to potentially patentable disclosures at least ninety (90) days prior to their planned publication. MEDI-SYSTEMS will inform OPI and the author(s) within sixty (60) days whether in its judgment a report contains patentable inventions on which patent applications should be filed.

9. Confidentiality of MEDI-SYSTEMS Information

MEDI-SYSTEMS may wish, from time to time, in connection with work contemplated under this Agreement, to disclose confidential information to OPI personnel. Any agreement relating to the terms and conditions of such disclosure shall be negotiated separately by MEDI-SYSTEMS with the individual OPI personnel involved, and shall include the requirement that any such information disclosed must be designated in writing by MEDI-SYSTEMS as confidential.

10. Patents

The parties agree that it is desirable to file applications for Patents on discoveries and inventions conceived or first reduced to practice in the course of research defined in Schedule A. OPI agrees to cause Patent Applications to be filed and prosecuted in its name at MEDI-SYSTEMS' expense as in the mutual judgment of both OPI and MEDI-SYSTEMS become appropriate during the course of this Agreement and up to six months after its termination. MEDI-SYSTEMS shall have the opportunity to file and prosecute Patent Applications at its own expense in OPI's name for those inventions for which OPI decides not to file Patent Applications; such Patent Applications and any Patents resulting therefrom shall be subject to the terms of this Agreement. OPI shall have the opportunity to file Patent Applications in its name at its own expense for those inventions made by its personnel and for which MEDI-SYSTEMS decides not to file Patent Applications; such Patent Applications and any Patents resulting therefrom shall not be subject to the terms of this Agreement.

Individuals conducting research under this Agreement shall keep records of all work performed and data developed in connection with this project in their normal and usual fashion. In order to evaluate whether patentable inventions have been made, all such records shall be made available for inspection by MEDI-SYSTEMS' Designated Representative at any reasonable time during OPI's regular working hours and at the convenience of the Principal Investigators, and copies of all or any part of such records shall be furnished to MEDI-SYSTEMS upon request. OPI shall insure that all research personnel supported by this Agreement sign OPI's Standard Participation Agreement (Schedule B).

Inventions made jointly by personnel of OPI and of MEDI-SYSTEMS conceived of or first reduced to practice in the course of research defined in Schedule A and any patent applications or patents issuing thereon shall be assigned to OPI and shall be subject to all the terms and conditions of this Agreement. In determining royalty rates in licenses to such patent applications or patents there shall be taken into consideration the relative contributions of the respective joint inventors to the invention.

It is understood that the Principal Investigator and other investigators working under this Agreement will cooperate with OPI and with MEDI-SYSTEMS in preparing patent applications, and shall on request execute documents necessary to effect filing of patent applications.

OPI shall cooperate with MEDI-SYSTEMS in the preparation, filing and prosecution of any Patent Application filed by OPI at MEDI-SYSTEMS' expense and in the maintenance of any patent issued thereunder. If the parties agree to defend any such patent, OPI shall cooperate with MEDI-SYSTEMS in so doing. OPI shall prosecute any such patent applications in a timely fashion and shall afford MEDI-SYSTEMS reasonable opportunity to review and comment on the draft form of any such patent applications and any other submissions filed in connection therewith.

11. Grant of Rights

OPI to the extent it is permitted to do so by its "Statement of Policy on Patents, Copyrights, and Other Forms of Intellectual Property," dated September, 1979, by its agreements with non-profit sponsors of research, and the provisions of Public Law 96-517 dated December 12, 1980, grants to MEDI-SYSTEMS an exclusive option to obtain exclusive world-wide licenses in the fields of anti-ulcer and muscle relaxant therapeutics under patent applications and patents filed pursuant to Section 10 of this Agreement and under any resulting patents.

Each such option shall extend for a period of 90 days from the date MEDI-SYSTEMS receives notification in writing of the filing of each United States and/or foreign patent application and a copy of such patent application. Each exclusive or non-exclusive, world-wide license shall include the right to grant sublicenses, and shall include a commitment by MEDI-SYSTEMS and any sublicensee to exert its best efforts to introduce the licensed material into public use as rapidly as practicable. Upon receiving such a license MEDI-SYSTEMS shall outline

for OPI its and/or its sublicensees' capability and/or plans to introduce such licensed material into public use. Until the end of the option period for each patent application OPI shall not offer these rights to any third party.

MEDI-SYSTEMS may exercise its option on OPI's Patent Applications or Patents by informing OPI of the identity of such patent application or patent and by providing a written statement of its intention to develop it for public use as soon as practicable, consistent with sound and reasonable business practices and judgment. Upon exercise of each such option, the parties shall negotiate in good faith for a license agreement granting MEDI-SYSTEMS a license to manufacture, have made, use and sell products based on the licensed patent application or patent as herein defined.

OPI shall have the right at any time after three years from the grant of each license, to terminate the exclusivity of such license if MEDI-SYSTEMS within ninety days after written notice from OPI of such intended termination of exclusivity, fails to provide a written showing that it has commercialized or is actively attempting to commercialize a patent application or patent licenses hereunder, and shall have the right, at any time after six years from the grant of such license, to terminate the license completely if MEDI-SYSTEMS within ninety days after written notice from OPI of such intended termination, fails to provide a written showing that it has commercialized or is actively attempting to commercialize the patent application or patent which is the subject of the license. A showing by MEDI-SYSTEMS that it has an ongoing and active research, developmental, manufacturing, marketing or licensing program as appropriate, directed toward production and sale of products based on the invention disclosed and claimed in the patent application or patent shall be deemed a satisfactory showing.

OPI shall retain a shopright under all patent applications and patents licensed to MEDI-SYSTEMS hereunder.

Any agreement granting rights to MEDI-SYSTEMS hereunder shall provide inter alia (i) for the payment of a negotiated royalty by MEDI-SYSTEMS at a rate that is usual and customary in the trade for comparable rights; (ii) that the rights of the United States of America as set forth under Public Law 96-517 are specifically reserved.

It is understood that the OPI investigators shall be free to discuss the research being performed under this Agreement with other investigators, and in the event any joint inventions result, OPI shall grant the rights outlined in this Section 11, to the extent these are not in conflict with obligations to another party as a result of the involvement of the other investigator(s). In this latter case, OPI shall use its best efforts to enable MEDI-SYSTEMS to obtain rights to the joint invention.

12. Liability

It is understood that MEDI-SYSTEMS shall not be liable for any claims against HARVARD, its employees, or third persons other than MEDI-SYSTEMS' employees for damage resulting from or arising out of the

activities of OPI personnel under this Agreement, and OPI agrees to hold MEDI-SYSTEMS harmless from any and all such claims. It is also understood that OPI shall not be held liable for any claims against MEDI-SYSTEMS employees, or third persons other than OPI employees, of damage resulting from or arising out of the activities of MEDI-SYSTEMS, its employees, or third persons other than OPI employees, and MEDI-SYSTEMS agrees to hold OPI harmless from any and all such claims.

13. Independent Contractor

For the purposes of this Agreement and all services to be provided hereunder, the parties shall be, and shall be deemed to be, independent contractors and not agents or employees of the other party. Neither party shall have authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other party, except as may be explicitly provided for herein or authorized in writing.

14. Governing Law

The validity and interpretation of this Agreement and the legal relations of the parties to it shall be governed by the laws of the

15. Parties Bound

This Agreement shall be binding upon and inure to the benefit of the parties hereto and the successors to substantially the entire assets and business of the respective parties hereto.

This Agreement shall not be assignable by either party without the prior written consent of the other party. Any and all assignments of this Agreement or any interest herein not made in accordance with Paragraph 15 shall be void.

16. Notices

Any notice or report required or permitted to be given under this Agreement shall be deemed to have been sufficiently given for all purposes if mailed by first class certified or registered mail to the following addresses of either party:

and

to such other addresses as shall hereafter have been furnished by written notice to the other party.

17. Title to Equipment

OPI shall retain title to all equipment purchased and/or fabricated by it with funds provided by MEDI-SYSTEMS under this Agreement.

18. No Oral Modification

No change, modification, extension, termination or waiver of this Agreement, or any of the provisions herein contained, shall be valid unless made in writing and signed by duly authorized representatives of the parties hereto.

19. Paragraph Headings

The paragraph headings are provided for convenience and are not to be used in construing this Agreement.

20. Survivorship

The provisions of Paragraphs 10 and 11 and 21 shall survive any expiration or termination of this Agreement.

21. Term and Termination

This Agreement shall remain in effect for 5 years from the effective date thereof unless sooner terminated in accordance with the Provisions of this Section.

Either party may terminate this Agreement as of the first or subsequent anniversary dates hereof by giving the other party one (1) year's prior written notice of its election to terminate.

In the event that either party shall be in default of any of its obligations under this Agreement and shall fail to remedy such default within sixty (60) days after receipt of written notice thereof, the party not in default shall have the option of cancelling this Agreement by giving written notice thereof.

Termination or cancellation of this Agreement shall not affect the rights and obligations of the parties accrued prior to termination. MEDI-SYSTEMS shall pay OPI for all reasonable expenses incurred or committed to be expended as of the effective termination date, including salaries for term appointees for the remainder of their terms of appointment.

22. Arbitration

In the event of any controversy or claim arising out of or relating to any provisions of this Agreement or the breach thereof, the parties shall try to settle those conflicts amicably between themselves. Should they fail to agree, the matter in dispute shall be settled through arbitration conducted by the American Arbitration Board. Such arbitration shall be held at a place mutually agreeable to the parties.

The award through arbitration shall be final and binding. Either party may enter any such award in a court having jurisdiction or may make application to such Court for jurisdictional acceptance of the award and on order of enforcement, as the case may be.

23. Entire Agreement

This instrument contains the entire Agreement between parties hereto. No verbal agreement, conversation or representation with any officer, agent or employee of the parties hereto either before or after the execution of this Agreement, shall affect or modify any of the terms or obligations herein contained.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as
of

MEDI-SYSTEMS

By: _____

ACCEPTED AND AGREED TO:

OMNI POLYTECHNICAL INSTITUTE

By: _____

December 15, 1982

SCHEDULE A
OPI Proposal

STATEMENT OF WORK

Drs. Eric Bannister and John Wolf
Principal Investigators
Omni Polytechnical Institute

We propose basic research under the OPI - Medi-Systems agreement as follows:

1. Research on genetic structure and control in E. Coli, Streptomyces, and B. Subtilis, including investigation of genes which may control protein production and yield in such bacteria;
2. Research on eukaryotic genes which may code for proteins which in turn may act as muscle relaxants, or other therapeutically interesting drugs;
3. Research on genetic fragments from plasmids and clones developed in the project to explore their physiological functions in triggering, regulating, and suppressing protein production;
4. Research on related topics as discussed with scientists at Medi-Systems.

December 15, 1982

SCHEDULE A
OPI Proposal

BUDGET

Drs. Eric Bannister and John Wolf
Principal Investigators
(In thousands)

<u>Expense Category</u>	<u>Year 01</u>	<u>Year 02</u>	<u>Year 03</u>	<u>Year 04</u>	<u>Year 05</u>
<u>Salaries & Wages</u>					
Professional	80	88	97	107	118
Staff	20	22	24	26	29
<u>Fringe Benefits (@18%)</u>	18	20	22	24	26
<u>Equipment</u>	155	22	28	28	27
<u>Supplies</u>	30	35	40	45	50
<u>Travel</u>	7	8	9	10	10
<u>All Other Direct Costs</u>	20	25	30	35	40
<u>Renovation</u>	125	---	---	---	---
<u>Overhead</u> (82% Total Direct Costs less Equipment over \$10K and Renovation)	145	180	200	225	250
TOTALS	<u>600</u>	<u>400</u>	<u>450</u>	<u>500</u>	<u>550</u>

OMNI POLYTECHNICAL INSTITUTE

Statement of Policy on Patents,
Copyrights and Other Forms of Intellectual Property

September, 1979

The Institute's principal mission is to teach, explore, create and disseminate ideas. Its scientists, scholars, and artists working in disciplines as diverse as the physical and natural sciences, medicine, the arts and humanities, communications media, and computer sciences are frequently at the forefront of their fields. Their work often results in important advances, producing innovations which may ultimately yield new products and processes beneficial to the public. The Institute is committed to insuring dissemination of these innovations for the greatest possible public benefit.

Four basic principles govern the conduct of this policy:

First, the Institute emphasizes the precedence of the public benefit over profit-making by itself, individual scholars, or external organizations granted proprietary rights to these innovations.

Second, the Institute reaffirms its responsibility to preserve the scholar's traditional right to publish when, wherever and however he or she chooses.

Third, the Institute is committed to meeting both the letter and the spirit of its agreements with external sponsors of research, particularly the Federal Government.

Fourth, where Institute support or participation leads to the creation or development of an innovation, the Institute shall share in any income which results from that innovation's introduction into public use.

Future policy changes will evolve in the manner of common law, formed from experience and precedents built up over a period of time. The Institute's Committee on Patents and Copyrights will administer the policy. The Committee is charged with interpreting and applying it in individual cases and recommending changes.

This policy applies to all members of the Institute, including students, in connection with their Institute work.

Patents

1. All members of the Institute are required to notify and disclose to the Technology Licensing Office of the Institute any discoveries or inventions they have made in connection with their University work.
2. The Institute has the first right to determine ownership of any such discoveries or inventions - such determinations to be made on a case-by-case basis by the Committee on Patents and Copyrights. If the

Institute decides to take title to a discovery or invention, the inventor(s) will cooperate, at no expense to them, with the Institute and/or its assigned agent, including the assigning of any patent rights they may have to the Institute, in order to permit the Institute to evaluate and otherwise manage their invention's development for eventual public use. Income resulting from patent applications or patents will be shared by the inventor and the Institute as provided in the Institute's income distribution schedule dated August 1, 1980. The Institute's arrangements with outside agents such as patent management organizations or industry licensees shall address the importance of serving the public interest, particularly in regard to granting exclusive licenses and the duration and limitations on such exclusivity.

3. Whenever discoveries or inventions result from work conducted under an agreement between the Institute and an external sponsor, the disposition of rights to such discoveries or inventions shall be determined in accord with the provisions of that agreement, notwithstanding paragraphs 1 and 2 above. All participants in externally sponsored research will continue to be required to accept the conditions in the agreement between the Institute and the sponsor before being permitted to participate in the sponsored research. In negotiating with sponsors, project directors and other representatives of the Institute shall strive to advance and protect the public interest as well as to obtain the greatest possible rights for the Institute and its inventors consistent with the public interest.
4. If the Institute decides not to take title to a discovery or invention, the inventor(s) may pursue patenting and commercial introduction of their invention without Institute assistance, subject to applicable obligations to external research sponsors. The inventor(s) shall make periodic progress reports to the Institute on their efforts to bring the discovery or invention to the marketplace. Inventors who obtain patents without Institute assistance shall be entitled to all resulting income. In pursuing patents and their development, inventors are expected to make arrangements that best serve the public interest. The Technology Licensing Office will be available to advise individuals on this subject as well as all other aspects of patent management.

Copyrighted Works and Other Forms of Intellectual Property

5. A member of the Institute is entitled to own copyrighted works as well as other forms of intellectual property which are not protected by patent or copyright law and to any income derived from such works including books, audio-visual media, cassettes, works of art, computer software, and scientific laboratory techniques.
6. The Institute shall own copyrighted works and other forms of intellectual property whenever it has specifically employed or instructed individuals to create them.
7. Whenever copyrighted works or other forms of intellectual property result from work conducted under an agreement between the Institute and an external sponsor, the disposition of rights to such works shall be determined in accord with the provisions of that agreement, notwithstanding paragraphs 5 and 6 above. If the agreement reserves only a royalty-free

use of such works to the sponsor, then paragraphs 6 and 7 shall be applicable. In negotiating with sponsors, project directors and other Institute representatives should strive to protect and advance the public interest as well as to obtain the greatest possible rights for individuals and the Institute consistent with the public interest.

General Provisions

8. In the case of sponsored projects which may lead to discoveries or inventions, copyrighted works, or other forms of intellectual property, the agreement with the external sponsor shall ordinarily provide for full support of the Institute's costs. In exceptional cases, the University may agree to waive a portion or all of such costs for public policy or other considerations.

MEDI-SYSTEMS LEGAL DEPARTMENT

January 5, 1983

MEMO

TO: Negotiators for the Omni Polytechnical Institute (OPI) sponsored research proposal

FROM: General Counsel

RE: OPI contract proposal of December 15, 1982

While this proposal serves OPI's needs quite well, it does not meet ours, especially in view of the investment (at OPI and here) we are making. It needs a lot of work.

My comments are divided into two sections: the first concerns the contents of the OPI proposal; the second is on what the proposal does not contain but will need if we are to enter into an agreement.

Section I: OPI proposal

Article 1, Scope of Work: We need considerably more detail than is offered here. I am especially concerned that there are no timetables, milestones, or descriptions of major projects (within this general statement) to be performed. We need all these elements in the work description so that we have some way of measuring performance.

Article 2, Compensation: OPI has used their negotiated Federal overhead rate here; it seems unreasonably high. I would recommend seeking a lower rate, perhaps 40-50% of total direct costs. This seems appropriate in view of the lack of any complex administrative requirements (including financial reporting) of OPI in the proposal.

I would also like to see a paragraph which gives us the ability to reduce the total amount should OPI underspend in any contract year, in lieu of the last sentence of this article.

Article 8, Publication: At a minimum, we should get language under which we can delay publication for up to six months, if patentable material is in the publication. Beyond that, I am concerned that both parties are aware that valuable non-patentable technology may be described in OPI (and Medi-Systems) publication, but there is no mechanism here to protect it; we should propose such a mechanism.

I am a bit puzzled by the phrase "planned publication" (lines 9, 10). It seems too vague to be meaningful and should be changed to "submission for publication."

Article 9, Confidentiality: This language is very risky in view of the large amounts of confidential data we expect to give to OPI in this project. We should propose something along the following lines:

"CONFIDENTIAL INFORMATION

The University agrees that, during the period of this Agreement and for a period of five (5) years thereafter, it will not disclose to others without the written consent of Medi-Systems any confidential information received from Medi-Systems and designated by Medi-Systems as being confidential. This obligation of the University shall not apply to information which is (a) actually and demonstrably known to the University before, (b) published or otherwise made generally available to the public through no fault of the University at any time before or after it was received, (c) disclosed by a third party who did not acquire it, directly or indirectly, from Medi-Systems under an obligation of confidence or (d) authorized for release, in writing by Medi-Systems. Upon termination or expiration of this Agreement, the University shall return to Medi-Systems all written or descriptive matter that it may have received from Medi-Systems which was identified or transmitted as confidential."

Article 10, Patents: There are three major problems here:

First, if we are to take on all patent expenses, we should have the ability to recover them out of royalties before any payments are made to OPI;

Second, if we are paying patent expenses, we should control the writing and submission of patent applications (including choice of foreign filings); we can consult with OPI on these decisions, but I believe our experience and expertise should give us the right to control in this area;

Third, the language on joint inventions (paragraph 2, page 3) should be deleted. I see no reason to give OPI such a strong position on joint inventions; we should simply state patent law on this subject (i.e. undivided interest to each party) and make these inventions subject to our own rights under a revised Article 11.

Article 11, Grant of Rights: This article is quite deficient in view of our \$3,000,000 plus commitment under this proposal. I suggest the following changes:

- delete the licensed fields stated in paragraph 1, (page 3) and substitute a statement that our option applies to all inventions made with our support;
- the option period should be changed from 90 days to one year;
- we should retain a first-refusal right after the end of the option period if we ask for a license and OPI has not yet granted one to another party;
- if we submit "plans to introduce such licensed material into public use" we should do so confidentially (paragraphs 1 and 2, page 4);

- OPI's timetable to terminate exclusivity (3 years) and the license itself (6 years) is completely unacceptable; we should insist on 10 and 12 years to accurately reflect the realities of producing pharmaceutical products;
- OPI's sole right to terminate exclusivity or the license itself, puts us in a very weak position; we need language which makes such a step a cooperative decision;
- what can the phrase "usual and customary" in paragraph 5, page 4 mean in this technological field?; we need a royalty ceiling here, either in % of net sales or dollar amount; I would also recommend language limiting sublicense royalty rates;
- the last paragraph of this article emphasizes the need for a confidentiality clause as suggested above;

Article 15, Parties Bound: We should add language here allowing us to assign our interest in the agreement to a subsidiary or affiliate of ours (or IMT's);

Article 21, Term and Termination: I recommend termination on 90 days notice, and limitation of our obligations to only those costs committed to be spent by the end of the year in which termination takes place.

Section II: Necessary additions

The most important missing item in this proposal is a provision for background patents. We need exclusive world-wide rights to OPI's two existing patents (for the life of those patents) and pending patent applications, if any. Without such rights, I see no rationale for us to enter into this proposed arrangement. I think we must insist that such rights be granted by the sponsored research agreement itself, not by license agreements to be negotiated separately.

Additionally, I think we should propose language under which non-patentable technology can be protected. We already know such technology has been and will continue to be devised by OPI's scientists and protection of it will be important in maintaining our competitive edge.

General Comments

In general, I think we should stress to OPI that Medi-Systems is an aggressive, start-up company which can be depended upon to run with any technology resulting from this project. In particular, we should note that Federal Law 96-517 (the "Bayh-Dole" bill) permits OPI to grant broad rights to small businesses which are not available to larger corporations and that we should be the recipient of such rights.

In addition, you should be aware that Drs. Bannister and Wolf have instructed their attorneys (in consultation with ours) to prepare agreements under which they will each receive 2% of the currently outstanding Medi-Systems stock, over a three year period. This is a very positive development, but it

certainly puts more pressure on us (and OPI) to reach agreement; Bannister and Wolf and our science people have become very close during the last year and they don't doubt for a minute they will all be working together for the next five years.

Finally, I understand OPI and several other major universities have been considering applying "tariff" or "fixed fee" of as much as 10% to industry-sponsored research. This seems completely out of the question to me in view of the total dollar amount of this agreement, the overhead rate, and the unique financing arrangements Medi-Systems has worked out to provide this support. No additional funds should be committed in this agreement.

Perhaps we can offer OPI a small amount of stock (2-4%) in the form of gifts starting in the third year of the agreement. As you know, this concept has been endorsed by our Board of Directors in the past as a means through which Medi-Systems can offer to share its future success with other institutions such as OPI without excess drain on our limited supply of capital. A portion of our stock has in fact been set aside for such purposes. I think we should also consider offering equity in license negotiations, as consideration for background patents or rights to future inventions.

PROPOSED CHANGES IN BY-LAWS

NOTE: Deletions are shown in brackets [].
Changes in wording are underlined.

Article I - Membership

Under MEMBER (a) and (b) - insertion of "including teaching hospitals".

Under AFFILIATED MEMBER - insertion of "education or teaching hospital" and "a not-for-profit research firm".

Article III - Meeting of Members

Deletion of "on due notice" in sentence on special meetings and rearrangement placing sentence on notification in first paragraph.

Last paragraph - deletion of "Secretary" to reflect division of duties of secretary and treasurer--separate offices are proposed.

Article IV - Trustees

First paragraph, line 2--changed to reflect the division of duties of secretary and treasurer.

Article V - Committees

First paragraph--"Annual Meeting and Education" committee is split into separate committees; "Resources" committee is renamed "Industry Relations" committee; "Nominating" committee is renamed "Nominating and Awards" committee. These changes are shown in the paragraph following.

Under "Nominating and Awards" Committee, three changes are proposed:

1. inclusion of Trustees-at-large
2. change in procedure for nominations
3. addition of duties relating to awards.

Under By-Laws Committee, addition of "Articles of Incorporation" and provision for interpretations at President's request.

Article VI - Officers and Trustees

First paragraph, line three--changes to reflect division of Secretary-Treasurer office.

First paragraph, page 6, line seven--deletion of word "Treasurer".

Under Secretary - deletion of "Treasurer" 4 places, and in line 5, insertion of words "as provided by the Treasurer".

Under Treasurer, deletion in line three of "President-Elect" and "Secretary". In line 5, new wording providing that Treasurer will maintain the current official membership roll.

Article VII - Elections

Entire current Article is deleted and a new "Nominations and Elections" article is proposed.

SOCIETY OF UNIVERSITY PATENT ADMINISTRATORS (SUPA) BY-LAWS

Draft 12-21-82

ARTICLE I

MEMBERSHIP

The following definitions apply to membership status:

MEMBER:

(a) Any person who is a full or part-time employee of an institution of higher education including teaching hospitals, whose responsibility includes the administration of the institution's inventions and/or other intellectual property, or who has the same responsibility as such person but is a full or part-time employee of an entity, corporate or otherwise, which administers inventions and/or other intellectual property for one or more of such institutions; or

(b) Any person who is not a full or part-time employee of an institution of higher education including teaching hospitals, but is regularly engaged by such an institution, on a retainer or other basis, to administer its inventions and/or other intellectual property.

Member status will be granted upon applying for membership in the manner prescribed by the Membership Committee; being elected to membership by such committee; and paying the dues for the year of such election to membership. Initial dues shall not be prorated.

AFFILIATED MEMBER: A person who is responsible for the administration of intellectual property belonging to or under the control of an organization other than an institution of higher [learning] education or teaching hospital, or of an entity which administers inventions and/or other intellectual property for one or more of such institutions, such as a not-for-profit research firm, an industrial concern, other profit making organization, government agency, etc., may become an Affiliated Member upon applying for membership in a manner prescribed by the membership committee.

MEMBER EMERITUS: A member of SUPA upon retirement from employment, at the member's written request, and upon approval of the Board of Trustees, shall attain the status of Member Emeritus.

ARTICLE II

DUES

The membership dues shall be such amount as may be fixed by the Board of Trustees from time to time. Regular annual dues shall be payable in advance on the first day of January of each year. Any member whose dues remain unpaid on the first day of March shall receive a notice of such non-payment, and if the dues are not paid within thirty (30) days after sending the notice, their membership shall terminate.

Member Emeritus: A Member Emeritus shall pay no dues.

ARTICLE III

MEETING OF MEMBERS

There shall be an annual meeting of the membership on a date and at a place to be designated by the Board of Trustees, either within or without the state of incorporation, for the election of officers and trustees and for such other business as may be properly brought before the meeting. The Board of Trustees may from time to time call special meetings of the membership. [on due notice.] Notification of any meeting at which action is to be taken by the members, trustees, or officers shall be presented in writing to the membership at least thirty (30) days prior to the scheduled meeting date.

The regional Vice Presidents may hold one or more meetings in their respective areas at any time except during the month in which the annual meeting is held.

Each member shall be entitled to one vote, in person or by written proxy, at all meetings of the membership, except as herein otherwise provided. Action may be taken by the vote of a majority of the members present and voting in person or by proxy. No business shall be conducted at any meeting unless at least a majority of the Trustees are present in person.

Affiliated Members: An affiliated member is eligible to attend all regular and special meetings and serve as a member of any committee. The affiliated member however shall not be entitled to vote.

Member Emeritus: Each member emeritus shall be entitled to one vote, in person or by return proxy, at all meetings of the membership, except as is herein otherwise provided.

At each annual meeting there shall be presented to the members and filed with the minutes of the meeting a report of the [Secretary] Treasurer setting forth as of the end of the last fiscal year a statement of the assets of the Society and where located or invested, the assets acquired and manner of acquisition, the amount and purpose of all expenditures during that year, and a report stating the number of members of the Society and the names and addresses of all new members.

ARTICLE IV

TRUSTEES

The Board of Trustees shall consist of the President, the immediate Past President, the three Regional Vice Presidents, the Secretary, the Treasurer, and four Trustees-at-Large. The officer trustees shall serve as long as they hold the office by reason of which they are authorized to serve on the Board. In the event of the death, resignation, or inability of any Trustee to perform his duties, the Board of Trustees shall have the power to elect a successor to serve out the term of his predecessor.

The Board of Trustees shall hold a meeting at the same place as, and immediately prior to, the annual meeting of the Society. The Board of Trustees elected at such annual meeting of the membership shall hold its first meeting immediately thereafter. Other meetings of the Board shall be held at such times and places, within or without the state of incorporation, as the Board of Trustees may decide, or at the call of the President, or upon the written request of three or more Trustees addressed to the President or the Secretary.

Fifty-one percent (51%) of the Board of Trustees present in person shall constitute a quorum for the purpose of transacting business at any meeting of the Board of Trustees, but in the absence of a quorum those present at the time and place set for the meeting may take an adjournment from time to time until, without further notice, a quorum shall be present.

ARTICLE V

COMMITTEES

The standing committees of the Society shall be as follows: Membership; Annual Meeting; [and] Education; [Resources] Industry Relations; Nominating and Awards; By-Laws; and such additional committees as shall be created and designated standing committees by the Board of Trustees. Except as provided in Article VI, the President shall appoint all standing committees.

Membership Committee: The Membership Committee shall promote membership in the Society, pass upon all applications for membership and elect to membership such qualified candidates as it deems desirable and in the best interests of the Society.

Annual Meeting Committee: This committee shall, subject to the approval of the Board of Trustees, make all arrangements for the annual meeting of the Society.

Education Committee: This Committee shall provide for educational programs at the annual meeting and all other regular or special, national or regional meetings of the Society, when an educational program would be appropriate.

[Resources] Industry Relations Committee: This Committee, with the approval of the Board of Trustees, shall make recommendations which, in its judgment, would bring about more effective transfer to the public of the fruits of inventiveness and literary creativeness.

Nominating and Awards Committee: This Committee shall nominate officers and Trustees-at-large as candidates for election at the annual meeting and shall assist the President and President-Elect in selecting committee members. [The Committee is encouraged to seek multiple nominations. There may also be nominations from the floor. The immediate Past President shall serve as a member of the committee.]

The Committee shall endeavor to have at least two nominations for each officer and trustee position to be filled and the qualifications of the nominees shall be distributed to the membership.

This Committee shall also make recommendations to the Trustees as to the types of awards of honor or appreciation to be granted by the Society, the standards therefor, and the procedures for selection of recipients and the granting thereof.

By-Laws Committee: This Committee shall study all proposals for amendments to the By-Laws and Articles of Incorporation and shall report thereon to the Board of Trustees, and shall also provide interpretations thereof upon request of the President.

ARTICLE VI

OFFICERS AND TRUSTEES

The officers of the Society shall be a President, three Regional Vice Presidents (one each for the eastern, central, and western regions of the United States), [and] a Secretary, and a Treasurer. Officers shall be elected at the annual meeting of the Society to serve for a period of two years, and until the election and qualification of their respective successors. In the event of death, resignation or inability of any officer to perform his duties, the Board of Trustees shall have power to elect a successor to serve out the term of his predecessor.

President: The President shall be the chief executive of and shall represent the Society. He shall preside at all meetings of the Society. He shall have the power to make, as directed by and subject to the approval of the Board of Trustees, contracts for and in the name of the Society. He shall have the power to appoint committees and perform such other duties as are usually required by his office or as may be delegated to him by the Board of Trustees. He shall be ex officio a member of all committees standing and special.

Vice President: In the absence of the President or in the case of his death, resignation, or inability to act, the Board of Trustees shall select from the Vice Presidents a president pro tem who shall exercise the authorities, powers, and duties of the President.

Each Vice President shall have general jurisdiction over his respective region. He shall have the authority to appoint, with the advice and consent of the President, such assistant regional Vice Presidents and regional committees as he shall deem advisable for proper conduct of the business of the Society in his region, and a regional Secretary who shall keep the minutes of all regional meetings and deliver the same to his regional Vice President for transmittal to the Secretary [Treasurer] of the Society. No such appointed person shall have, without express authority from the President or the Board of Trustees, any authority to bind or obligate the Society financially or in any other way whatsoever.

The Vice Presidents shall perform all such other duties and exercise such other powers as may be delegated to them by the Board of Trustees.

Secretary [Treasurer]: The Secretary [Treasurer] shall keep a record of the proceedings of the Society and of the meetings of the Board of Trustees. These records shall be open to inspection by any member at all reasonable times. The Secretary [Treasurer] shall notify members of their election, keep a roll of the membership as provided by the Treasurer, issue notices of all meetings of the membership and of the Board of Trustees, conduct correspondence, and make an annual report in writing at the annual meeting. The Secretary [Treasurer] shall have custody of the minute books and by-laws and perform such other duties as usually pertain to this office or that may be assigned by the Board of Trustees, and shall provide each member of the Board of Trustees with a written copy of the minutes of all meetings within thirty (30) days after the meeting.

Treasurer: The [person] Treasurer shall collect dues, receive and take charge of all monies and other assets belonging to the Society, disburse the same upon the authority of the President, [President-Elect] or [Secretary] Treasurer, and make a full written report of the details of receipts and disbursements at each meeting of the Board of Trustees and at the annual meeting. The Treasurer shall also maintain the current official membership roll.

Trustees-at-Large: The four Trustees-at-Large shall serve for two-year terms. The first two of the four trustees shall serve for one year and the second two shall serve for two years. Two trustees will be elected each year at the annual election thereafter.

ARTICLE VII

ELECTIONS

The election of Officers and Trustees shall be carried out at the annual meeting of the Society by the Members present at the meeting. Multiple nominations are encouraged though are not mandatory.

ARTICLE VII

NOMINATIONS AND ELECTIONS

Officers and Trustees-at-Large shall be nominated by the Nominating Committee which shall solicit suggestions from members of the Society and thereafter select a slate of candidates and cause it to be announced to the membership prior to the annual business meeting. Ballots shall provide for write-in candidates. Officers and the Trustees-at-Large shall be elected by majority vote of the entire membership present at the annual meeting. An Elections Committee appointed by the President shall prepare, distribute, collect, and count written ballots at the meeting at which the election is to take place according to such procedures as shall be fair and proper. The Committee shall promptly report election results to the President who shall announce the results.

ARTICLE VIII

MISCELLANEOUS PROVISIONS

Fiscal Year: The fiscal year of the Society shall be the twelve (12) month period ending December 31st of each year unless otherwise designated by the Board of Trustees.

Bank Accounts: The Society shall have such bank accounts as the Board of

Trustees shall authorize from time to time. All such accounts shall be subject to withdrawal on the signature of any one of the President [or the Secretary] or the Treasurer. A Regional Vice President with the written approval of the President, in each case, shall have authority to establish a bank account for receipts and disbursements in connection with regional meetings, but not for deposit of general funds of the Society. Such accounts shall be subject to withdrawal on the signature of such Regional Vice President or other person or persons as the President shall designate. All persons authorized to sign checks shall be bonded for amounts determined by the Board of Trustees, the cost thereof to be paid by the Society.

Notice: Whenever notice of any meeting or action is required to be given under the laws of the state of incorporation, the Articles of Incorporation or these By-laws, a waiver thereof in writing, signed by the person or persons entitled to receive such notice, whether before or after the time fixed for such meeting or action, shall be deemed equivalent to the required notice.

Membership Lists: The membership and attendance lists are the property of the Society of University Patent Administrators and are entrusted to Society members for their personal information only. Reproduction of such lists is not authorized and their use for general mailings for purposes other than SUPA business is discouraged.

Dissolution: In the event of the dissolution of the Society, the Board of Trustees shall distribute the remaining assets of the Society to a charitable or educational institution selected by the Board in its discretion.

ARTICLE IX

BY-LAWS

These By-Laws shall be altered or rescinded by majority vote of the membership present and voting at any regular or special membership meeting.

Such consultation shall be completed within _____ days, unless extended by agreement of the parties.

This paragraph pertains only to research by university personnel other than those assigned to or working on the research project. Company recognizes that such personnel may receive financial support from any source for research within the field of agreement. University recognizes that company is interested in keeping informed about progress in scientific areas within, and directly pertinent to, the field of agreement; accordingly, university will (a) send to company copies of the university's general publications and calendars of seminars and lectures; and (b) facilitate appropriate meetings, in line with the university's traditional pattern, between company's scientific staff and investigations at the university. In addition, university will make a good faith effort to identify promising projects and planned projects at an early stage that are within or arguably related to the field of agreement; for all such projects, the principal investigators at university shall be asked whether their research proposals may be submitted to company for information purposes. Whenever agreeable to any of the individual principal investigators, company shall also be given the opportunity to fund their research; and company shall have up to sixty (60) days to decide whether to provide such funding.

Indemnification - University and company are independent entities, and neither is the agent of the other under this agreement. University shall indemnify and hold company, its employees, representatives and agents, harmless against all claims of university and of university employees, representatives or agents, and all third parties, for loss, damages, or injuries arising out of the performance by university or by others at the request of university, of the university functions