

FINAL

May 13, 1981



AGREEMENT, effective as of this 14th day of May, 1981, by and between THE GENERAL HOSPITAL CORPORATION, a not-for-profit corporation formed under the laws of the Commonwealth of Massachusetts ("MGH") and Hoechst AG, a corporation organized and existing under the laws of the Federal Republic of Germany (the "Company").

W I T N E S S E T H:

WHEREAS, MGH is engaged in ongoing programs of basic research in accordance with the scientific and educational purposes for which it was founded, and

WHEREAS, the Company desires to provide funding to MGH for the purpose of doing basic research in the Field of Research as defined in this Agreement, and

WHEREAS, MGH is willing to accept such funding from the Company in accordance with the terms and conditions provided in this Agreement,

NOW, THEREFORE, the parties hereto hereby agree as follows:

ARTICLE I  
DEFINITIONS

1.1. Field of Research

"Field of Research" shall mean research in the field of molecular biology generally with specific initial emphasis in the areas of eukaryotic cell gene regulation, somatic cell genetics, microbial genetics, virology, immunology, and plant molecular biology.

1.2. Sponsored Research

"Sponsored Research" shall mean research funded in whole or in part by the Company pursuant to this Agreement.

1.3. Department

"Department" shall mean the separate laboratory or series of laboratories at MGH which shall be designated as the "Department of Molecular Biology", located in space more fully described in Exhibits A and B, to be established, staffed and administered by MGH in accordance with the provisions of this Agreement with funding provided by the Company for the purpose of doing basic research in the Field of Research in accordance with the scientific and educational purposes of MGH with a view to opening new avenues in the life sciences and providing a knowledge base for the development of new products of benefit to mankind.

1.4. Director

"Director" shall mean the scientist selected to head the Department in accordance with the provisions of this Agreement.

1.5. Senior Investigators

"Senior Investigators" shall mean the scientists selected to head research in the areas set forth in Section 1.1.

1.6. Scientific Advisory Board

"Scientific Advisory Board" shall mean the scientific board established pursuant to Section 5.2 hereof having oversight and review functions with respect to the work at the Department.

1.7. Invention

"Invention" shall mean any new and useful process, machine, manufacture, or composition of matter (a) conceived prior to this Agreement but first reduced to practice during Sponsored Research, or (b) conceived or reduced to practice as a result in whole or in part of Sponsored Research.

1.8. Patent Application

"Patent Application" shall mean any United States or foreign patent application, including any division, continuation or continuation-in-part thereof, claiming any Invention in which MGH has rights by virtue of sole or joint inventorship by a staff member, student or employee of the MGH or by the terms of a written agreement.

1.9. Patent

"Patent" shall mean any United States or foreign patent, including any reissue patent, issuing from any Patent Application.

1.10. New Research Building

"New Research Building" shall mean the new research building referred to in Exhibit B.

ARTICLE II

RIGHTS AND OBLIGATIONS OF THE COMPANY

2.1. Funding

The Company shall provide MGH with funds for the following purposes:

(a) funds for the design, renovation and furnishing of the initial space to be occupied by the Department on Jackson 11 and 12 and equipment for the Department;

(b) funds for the design and construction of space occupied by the Department in the New Research Building;

(c) funds for additional equipment for the Department in the New Research Building; and

(d) funds for the annual operating costs of the Department required to carry on Sponsored Research during the term of this Agreement;

all in accordance with the payment schedule provided for in Section 2.2.

All equipment and furniture purchased with funds provided by the Company shall be the property of MGH, and shall be maintained and insured by MGH for the purpose of the Department, in the same manner and to the same extent as comparable MGH property is maintained and insured (but with the expense thereof being charged as an operating cost of the Department hereunder). In the event that MGH desires to transfer such equipment and furniture out of the Department during the term of this Agreement, it may do so with the consent of the Director and upon paying to the Company the fair market value thereof determined at that time.

2.2. Amount and Timing of Payments

A. The Company shall provide guaranteed funding and may provide discretionary funding for the Department under this Agreement in accordance with the following schedule:

(a) Guaranteed funding in an amount not to exceed \$2,300,000 to cover the costs of design and renovation of space at MGH (Jackson 11 and 12) and \$2,500,000 to cover the cost of furniture and equipment therefor, to be paid by the Company with reasonable promptness upon receipt of appropriate evidence or notice that such payment is due;

(b) Guaranteed funding in an amount not to exceed \$10,800,000 to cover the cost of designing and constructing the 30,000 square feet of space to be occupied by the Department in the New Research Building. It is expected that such funding shall be provided to MGH on or before

September 1, 1981; it may, however, be deferred at the option of the Company but shall in any event be paid on or before the commencement of construction of the New Research Building.

(c) Guaranteed funding in an amount not to exceed \$2,000,000 to cover the costs of furniture and equipment for 30,000 square feet of space in the New Research Building, the same to be paid by the Company with reasonable promptness upon receipt of appropriate evidence or notice that such payment is due;

(d) Guaranteed funding in an amount not to exceed the following annual sums to cover annual operating costs of the Department required to carry on Sponsored Research during each of the years noted:

<u>Fiscal Year Ending Sept. 30</u>	<u>Guaranteed Funds for Operating Costs (in addition to guaranteed funds for design, furniture and equipment for the Department)</u>
1981	\$ 500,000.00
1982	\$ 3,600,000.00
1983	\$ 3,600,000.00
1984	\$ 6,000,000.00
1985	\$ 6,000,000.00
1986	\$ 6,000,000.00
1987	\$ 6,000,000.00
1988	\$ 6,000,000.00
1989	\$ 6,000,000.00
1990	\$ 6,000,000.00

Funding to cover operating costs pursuant to this Section 2.2A(d) shall be paid by the Company to MGH on a quarterly basis. At least five days prior to the first business day of each fiscal quarter during the term of this

Agreement, the Company will provide MGH with the amount estimated to be needed for such quarter. Promptly after the end of such quarter MGH will provide the Company with a statement of actual operating costs of the Department for such quarter, which statement will reconcile the estimated and actual costs. To the extent that actual costs in such quarter exceed estimated costs, the Company shall add the deficit to the next quarterly payment to be made by it. To the extent that estimated payments exceed the actual costs in such quarter, the Company may credit the excess against the next quarterly payment to be made by it. Nothing in the foregoing quarterly payment and reconciliation procedure shall increase or reduce the Company's annual funding obligations under this contract.

(e) Discretionary funding in such additional amounts as the Company, in its sole judgment, may approve after consultation with the Director and MGH, as appropriate.

B. (a) The guaranteed funding amounts provided for in Section 2.2A (as adjusted pursuant to Section 2.2C) plus any discretionary funding amounts from time to time hereafter approved under Section 2.2A(e) constitute the limits of the Company's financial liability under this contract.

(b) Should the actual costs described in Sections 2.1(a), 2.1(b), 2.1(c) and 2.1(d) be less than the funding guaranteed to cover such costs provided for in Sections 2.2A(a), 2.2A(b), 2.2A(c) and 2.2A(d) (as adjusted pursuant

to Section 2.2C) the funding guaranteed shall be automatically reduced to such actual cost level.

(c) Prior to making any of the payments called for by this Section 2.2, the Company shall have the right to review a detailed budget prepared by MGH and submitted to the Company pursuant to Section 4.2.

(d) Payments under Section 2.2A shall be made by the Company to MGH, who shall be responsible for actual disbursement of the funds.

C. The guaranteed amounts set forth in Sections 2.2A(b) and (d) are in 1981 dollars. Such amounts shall be adjusted to reflect changes in the value of the dollar between 1981 and the time of payment as provided below:

(a) If the \$10,800,000 payment for the construction of the New Research Building set forth in Section 2.2A(b) is not made by September 1, 1981, it shall be increased by 1% per month for each month or portion thereof which such payment is delayed beyond September 1, 1981.

(b) The guaranteed amounts set forth in Section 2.2A(d) for each of the fiscal years ending 1983 through 1990 shall be adjusted at March 31 in the fiscal year of payment by multiplying such amount by a fraction, the numerator of which is the CPI-Medical Care Professional Services Component (published by the U.S. Bureau of Labor Statistics) (the "Index") for the calendar year

ended December 31, 1982 through 1989, respectively, and the denominator of which is the Index for the year ended December 31, 1981.

For purposes of this section the Index referred to above shall be the most recent such figures published by the agency responsible therefore at the time of adjustment, even though such figures may be tentative and subject to subsequent readjustment.

### 2.3 Reimbursement or Repayment in Certain Events.

A. Upon the termination or expiration of this Agreement:

(a) MGH shall pay to the Company the fair market value, determined at that time, of such equipment and furniture purchased with funds provided by the Company as MGH desires to retain; and

(b) MGH shall offer to the Company at no cost such equipment and furniture as MGH desires not to retain and to the extent the Company does not want to accept such furniture and equipment, it shall be sold or otherwise disposed of by MGH and the net proceeds (after expenses of sale) thereof turned over to the Company.

(c) MGH shall repay to the Company an amount (not less than zero) equal to the construction cost paid to the MGH by the Company under Sections 2.2A(b) multiplied by a fraction, the numerator of which is the number of years between the termination date and June 30, 2001 and the denominator of

which is 20, provided however that in no event (other than a material breach of this agreement by MGH) shall MGH be obligated to repay the Company more than half of such construction cost.

B. In the event MGH does not commence construction of the New Research Building on or before April 1, 1982, MGH shall repay to the Company the amount which the Company paid to MGH under Section 2.2A(b) (increased as provided in Section 2.2C(a)) together with interest on such amount from the date of payment to the MGH until the date of repayment to the Company at the rate which MGH earned on such amount by investments in short-term obligations of the United States Government or certificates of deposit of major banks.

### ARTICLE III

#### TERM OF THIS AGREEMENT

##### 3.1. Initial Term

This Agreement shall have an initial term ending September 30, 1990. Thereafter this Agreement shall be automatically extended for additional periods of five fiscal years, upon the same terms and conditions and at the same funding level as in effect at the end of the term (subject to continued adjustment for changes in the Index), unless either party shall notify the other, in writing, prior to the end of the second fiscal year prior to such automatic renewal, that it elects not to renew this Agreement.

At the end of fiscal 1986, the joint Committee referred to in Article VII shall review the performance of the Department and report its findings. If, on the basis of this review, MGH and the Company are of the opinion that the purposes for which the Department was established are not being carried out in a satisfactory manner then, after consultation and with the approval of the Company, MGH shall take such steps as it believes necessary and proper to correct such situation; but such review and any consequent reorganization shall not in any way relieve either party of its obligations to the other for the continued support and operation of the Department and performance of this Agreement for the balance of the initial term of this Agreement.

3.2. Exclusive Funding Rights. During the term of this Agreement, the Company shall have the right to fund all research at the Department in addition to research the funding for which is guaranteed pursuant to Section 2.2A(d). ✓ Any such research the Company declines to fund may be funded by other sources; provided, however, that MGH shall not, without the prior written consent of the Company, seek or accept funding for such research to be conducted at the Department from any other profit-making entity; and provided, further, that, in the event that the Company shall notify MGH of its election not to renew this Agreement, MGH may during the final two fiscal years of this Agreement seek

and accept funding from any source, such funding to commence not earlier than the termination of this Agreement unless otherwise agreed by the Company.

MGH agrees to do nothing in the renovating or the initial equipping of Jackson 11 and 12 or in the construction or initial equipping of the new laboratory space in the New Research Building to allow any third party, including the United States Government, to acquire any rights or equity in any work solely accomplished in the Department by personnel of the Department. MGH represents that to the best of its knowledge there is on the date hereof no state of facts relating to the construction, renovation or initial equipping of Jackson 11 and 12, or to the construction or initial equipping of the new laboratory space, that would provide any such rights to any third party, including the United States Government.

#### ARTICLE IV

#### RIGHTS AND OBLIGATIONS OF MGH

##### 4.1. Space and Equipment of the Department

MGH will forthwith establish, staff and administer the Department to carry on Sponsored Research in accordance with this Agreement as a separate department of MGH. The Department will be initially located in the MGH space described in Exhibit A attached hereto (herein referred to as "Jackson 11 and 12"). MGH shall provide to the

Department scientific and support staff of approximately 50 persons and shall use its best efforts to increase the space within a period of three years to approximately 30,000 square feet of interior space by supplying space in the New Research Building and scientific and support staff of approximately 100 persons. The MGH shall, as soon as is reasonably possible, apply for a Massachusetts Health and Educational Facilities Authority bond issue to cover the costs of design and construction of the New Research Building.

All contracts for the preparation of space, the purchase or lease of equipment or furnishings, the hiring of staff and operation of the Department shall be in the name of MGH, which shall be responsible for the administration and activities thereof. MGH shall exercise the same care and prudence in the establishment and administration of the Department as it exercises with respect to other departments or operations of MGH.

#### 4.2. Department Operating Budgets

Three months prior to the beginning of each fiscal year during the term of this Agreement, MGH shall prepare and submit to the Company for its review an annual budget for the operation of the Department during such fiscal year. Such budget shall be prepared in such detail as shall be reasonably requested by the Company and may include as operating costs of the Department allocations for indirect

costs in accordance with Exhibit C attached hereto. Such budget shall separately identify each capital expenditure of \$50,000 or more, which capital expenditures the Company shall not be obligated to fund.

In the event that the Company shall decline to fund research included in the budget but in excess of its guaranteed funding obligation, or shall decline to fund a capital expenditure in excess of \$50,000, it shall so notify MGH within thirty (30) days after receipt of the budget, in which event MGH may seek other funding for such research or capital expenditure in accordance with Section 3.2.

#### 4.3. Personnel

MGH shall, after consultation with the Company, select candidates for the posts of Director and five (5) Senior Investigators. Such candidates shall be selected on the basis of recommendations of a search committee appointed by MGH in accordance with its normal policies and procedures for the selection of senior staff. It is agreed that Dr. Howard M. Goodman shall be the initial Director. The Director shall have a rank and function equivalent to a Chief of Service at MGH. The employment of the Director shall be for a term of ten (10) years. The Director and the Senior Investigators shall be regular members of the staff at MGH, nominated for membership in the faculty of the Harvard Medical School, and as appropriate, recommended for tenure at the Harvard Medical School. MGH shall enter into

written Participation Agreements with the Director, the Senior Investigators, other Department personnel and others engaged in Sponsored Research in the form attached hereto as Exhibit D. All conditions of employment for the Director, the Senior Investigators and others engaged in Sponsored Research shall be arranged in accordance with the normal practices of MGH.

Costs and expenses incurred in search and recruitment activities for the Department shall be deemed part of the operating costs of the Department.

## ARTICLE V

### THE DEPARTMENT

#### 5.1. Administration

All of the Sponsored Research will be carried on through the Department, under the direction of the Director. The Director will be responsible for the coordination of the work of the Department and the preparation and submission of an annual written report to the Company, to MGH and to the Scientific Advisory Board of the Department setting forth the significant developments at the Department during the past fiscal year and outlining its direction for the coming year.

The Director and each Senior Investigator, with the approval of the Director, shall select subjects of research

and formulate research programs which conform to the broad goals of the Department.

### 5.2. Scientific Advisory Board

A Scientific Advisory Board shall be established consisting of six (6) qualified scientists, two (2) of whom may be affiliated with and shall be appointed by the Company, two (2) of whom may be affiliated with and shall be appointed by MGH, and two (2) of whom shall be unaffiliated with either the Company or MGH, but shall be jointly appointed by the Company and MGH.

The Scientific Advisory Board shall be responsible to review the annual report prepared by the Director and shall prepare its independent evaluation of the work of the Department. It may consult with the Director and with Senior Investigators of the Department, where appropriate, and will make recommendations concerning the work and operation of the Department either on its own initiative or in response to a request from either the Company or MGH. Recommendations made to the Department by the Scientific Advisory Board shall be deemed to be advisory only.

### 5.3. Faculty Duties

The Director and each Senior Investigator will devote their time primarily to research for the Department within the Field of Research and related activities. The Director and each Senior Investigator may also devote a reasonable amount of time to faculty duties other than research and to

consulting for non-profit-making entities so long as such activities do not interfere materially with their research activities under this Agreement.

#### 5.4. MGH Rules and Regulations

Except as otherwise explicitly provided herein, the Department and its staff shall be subject to all rules, regulations, policies and procedures of MGH. Research conducted at the Department or by Department personnel will conform to MGH research and experimentation regulations and to all federal, state, and local laws applicable thereto.

#### 5.5. Senior Investigator Reports

The Senior Investigators shall prepare individual annual reports on the progress of their research. The Director shall incorporate such individual reports in the annual report described in Section 5.1. Each Senior Investigator's report shall include reprints of all scientific articles published by such Investigator during the year covered by the report.

#### 5.6. Investigator Status at MGH

The Director and the professional staff of the Department shall have the same access as other members of the MGH professional staff to the facilities of MGH.

#### 5.7. Scientific Programs and Reports for the Company

At least once a year, the Department will present a symposium of two or three days' duration for invited members of the academic community for the purpose of discussing the

programs and research being conducted by the Department. The Company may send its employees and other individuals to such symposium, but shall provide the Department notice of the number of such people to attend. In addition, the Director will report directly to the Company's representatives up to three (3) times a year in Frankfurt, Germany or such other place as shall be designated by the Company. Senior Investigators of the Department shall be available to confer with representatives of the Company at least once a year in Frankfurt, Germany or at such other place as shall be designated by the Company.

#### 5.8. Training

The Company shall have the right to send up to four (4) individuals to work and be trained at the Department at any one time. These individuals shall have qualifications acceptable to the Department.

#### 5.9. Collaborative Work

(a) Each scientist at the Department shall be free to collaborate with others, subject to the terms of his Participation Agreement.

(b) Research collaborations funded in part by the Company and in part by others shall take into account the interest of the Company in obtaining exclusive, world-wide licenses. Such collaborations shall be arranged in a manner which will entitle the Company to the most favorable License

(as defined in Section 6.3) obtainable, which shall be at least a nonexclusive license.

(c) MGH, without the prior written consent of the Company, shall not enter into any agreement for research collaboration to be conducted by employees of the Department with any profit-making entity.

5.10. Office of Technology Administration

MGH, acting through its Office of Technology Administration, shall maintain, administer and use its best efforts, to enforce such policies and procedures, including specifically the Participation Agreements, the Statement of Policy on Consulting Arrangements and the Patent Policies and Procedures set forth as Exhibits D, E and F to assure compliance with this Agreement and protect the interests of the Company hereunder.

ARTICLE VI

PROPERTY RIGHTS

6.1. Right to Publish

The right of individual scientists employed at the Department to publish research results in accordance with the educational and scientific purposes and policies of MGH shall not be infringed. MGH will submit to the Company early drafts of all manuscripts authored by members of the Department resulting from any Sponsored Research not less than 30 days prior to the submission of the manuscript for

publication and the Company shall have the right to advise MGH as to the patentability of any inventions disclosed therein. At the end of such thirty-day period, the scientist shall have the right, at his sole discretion, to submit such manuscripts for publication.

#### 6.2. Patent Rights

Each individual working at the Department or otherwise participating in Sponsored Research shall promptly disclose to the MGH Office of Technology Administration all Inventions arising out of such Sponsored Research in accordance with his Participation Agreement. The Office of Technology Administration shall promptly advise the Company of all such Inventions. Representatives of MGH and the Company shall then discuss whether Patent Applications shall be filed with respect to such Inventions and, if so, the scope of such Applications. In the event the Company and MGH agree that Patent Applications should be filed, the Application shall be filed in the name of MGH, but at the expense of the Company. In the event the Company is not interested in having Patent Applications filed with respect to a particular Invention, it shall advise MGH of such fact within ninety (90) days of being advised of the Invention by MGH and MGH shall be free to do so at its own expense or may dispose of the patent rights to such invention, or release them to the inventor, as it deems fit. In the event that MGH does not wish to file a Patent Application with respect

to a particular Invention, or does not wish to file Patent Applications with respect to specific countries, it shall without delay notify the Company and the Company shall be free to file patent applications in its own name, and MGH shall render the Company all necessary assistance, including assignment of patent rights, in order to facilitate such filing. All costs of mutually agreed-upon prosecution, maintenance, working and defense of Patents licensed exclusively to the Company shall be borne by the Company. In any case where the Company is granted only a nonexclusive license, the Company will share the costs of patent prosecution, maintenance, working and defense with the other nonexclusive licensee or licensees. The Company shall be free to make commercial use of any nonpatentable discovery arising out of the Sponsored Research.

MGH, acting through its Office of Technology Administration shall maintain, administer and, to the extent practical, enforce such policies and procedures as are reasonably necessary to comply with this Agreement. MGH shall cooperate with the Company, at the expense of the Company, in the maintenance, working, prosecution and defense of any Patent Application or Patent licensed to the Company hereunder.

### 6.3. Licenses

A. As to each Patent Application which MGH shall file during the term of this Agreement, MGH shall, upon written

request, submitted by the Company within the eighteen (18) months next following the date of such Application, grant to the Company and any affiliated entity designated by the Company, a license as defined in the following paragraph B, including whenever possible the right to grant sublicenses thereunder; and, in the absence of such request, MGH may grant a license to such Patent to any other person or persons on any terms.

B. The license granted pursuant to 6.03A ("License") shall be:

(a) with respect to Patents resulting from Sponsored Research funded exclusively by the Company, an exclusive world-wide license for the life of the Patent;

(b) with respect to any Patent resulting from collaborative research funded in part by the Company, an exclusive world-wide license for the life of the Patent whenever possible, and when not possible the most favorable license obtainable but in any event a nonexclusive world-wide license for the life of the Patent;

(c) with respect to any Patent claiming an Invention conceived during the term of this Agreement as a result of Sponsored Research but first reduced to practice within the 30 months next following the termination of this Agreement, the most favorable

license obtainable but in any event a nonexclusive world-wide license for the life of the Patent.

C. With respect to any Invention conceived prior to affiliation of the inventor with the Department as to which any other person or entity may have rights, it is understood that any License to the Company with respect to such Invention may be subject to such rights.

D. In the event that the Company, either directly or through an affiliate or sublicensee, does not begin actual commercial development of any Invention (i.e., make use of the Invention with the bona fide intention to market products as soon as practicable) licensed or sublicensed to such entity under this Agreement within three years after the date of filing of the Patent Application with respect thereto, any license or sublicense granted to any such entity hereunder for such Invention shall become nonexclusive.

#### 6.4. License Royalties

The Company shall pay MGH royalties for any License granted pursuant to Section 6.3 of the Agreement. The royalty rates shall be established giving due consideration to the Company's funding of Sponsored Research and, during any period in which the difference between

- (x) the aggregate amount of royalties that would have been paid by the Company through such

period on all licenses had the royalty rates been the fair commercial rates, and

(y) the aggregate amount of royalties actually paid by the Company through such period on all licenses

is less than the aggregate amount of all payments made by the Company under Sections 2.2A through such period, all calculated on a cumulative basis, the royalty rates paid by the Company shall not exceed, on any, license 50% of the fair commercial royalty rate for such license. In the event the parties cannot agree on the fair commercial royalty rate, the matter will be submitted to arbitration in accordance with the procedures of the American Arbitration Association.

With respect to any Patent as to which the Company and its designated affiliates are not the only licensees, the royalty rate to the Company and its designated licenses shall be no less favorable than the royalty rate to any other nongovernmental licensee under such Patent. Any royalties paid by the Company hereunder will be allocated among the inventor, the Department, the inventor's laboratory, and the general research funds of the MGH in accordance with the Patent Policies and Procedures set forth in Exhibit F.

The portions of any royalties allocated to the Department and to the inventor's laboratory shall be used to

pay operating expenses of the Department, in which case the Company's obligation to provide guaranteed funding pursuant to Section 2.2A(d) shall be reduced by an equal amount.

#### ARTICLE VII

##### Joint Committee

The MGH and the Company shall form a Joint Committee composed of three members of the Board of Trustees of the MGH and three senior executives of Hoechst AG designated by the board of management of Hoechst AG. The function of the Joint Committee shall be to oversee the implementation of this Agreement and serve as a forum for communication between the MGH and Hoechst AG with respect to matters arising under the Agreement. The Joint Committee shall meet at least once each year at locations to be determined by the Committee.

#### ARTICLE VIII

##### ASSIGNMENT

Either party may assign its rights and obligations under this Agreement to any corporation controlling, controlled by or under common control with the party, provided however that:

- (a) Any assignment by the Company shall not be effective unless accompanied by a guaranty by the

Company of the performance of its assignee hereunder;  
and

(b) Any assignment by MGH shall not be effective unless accompanied by a guaranty by MGH of the performance of its assignee hereunder and shall not operate to change the scientific character of the Department or to give rights in Sponsored Research to any profit making entity.

## ARTICLE IX

### NOTICES

#### 9.1. Notice to the Company

All notices to the Company under this Agreement shall be deemed effective if made in writing and deposited in the United States Post Office, or with the postal service of the Federal Republic of Germany, postage prepaid, address as follows:

Dr. Hansgeorg Gareis  
Hoechst Aktiengesellschaft  
Postfach 80 03 20  
6230 Frankfurt (Main) 80  
West Germany

With copy to:

William H. Griesar, Esq.  
Rogers Hoge & Hills  
90 Park Avenue  
New York, New York 10016

9.2. Notice to MGH

All notices to MGH under this Agreement shall be deemed effective if made in writing and deposited with the postal service of the Federal Republic of Germany or in the United States Post Office, postage prepaid, addressed as follows:

General Director  
The General Hospital Corporation  
Fruit Street (White 1)  
Boston, Massachusetts 02114  
U.S.A.

With copy to:

David M. Donaldson, Esq.  
Ropes & Gray  
225 Franklin Street  
Boston, Massachusetts 02110  
U.S.A.

ARTICLE X  
BINDING EFFECT

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. However, the parties agree that the obligation of the Company to go forward with this Agreement is contingent upon Howard Goodman making an arrangement with Advanced Genetic Sciences, Inc. ("AGS") to protect Howard Goodman, the MGH and the Company from claims made by AGS. In the event such an arrangement is not made to the satisfaction of the Company or or before September 1, 1981, either party may terminate this agreement by giving notice to the other party, in which case any sums heretofore paid hereunder shall be returned.

ARTICLE XI  
ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties with respect to the funding and exploitation of research in the Field of Research and supersedes all prior agreements, whether written or oral, and shall not be modified except by a writing signed by both parties.

ARTICLE XII  
GOVERNING LAW

This Agreement will be governed by and construed in accordance with the laws of The Commonwealth of Massachusetts.

ARTICLE XIII  
MISCELLANEOUS

The headings in this Agreement are for convenience of reference only and shall not alter or otherwise affect the meaning hereof.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

THE GENERAL HOSPITAL CORPORATION

DATED:

By \_\_\_\_\_

HOECHST A.G.

DATED:

By \_\_\_\_\_

## EXHIBIT A

### Proposed Interim Research Facilities for the Department of Molecular Biology

The Department of Molecular Biology will occupy the renovated floors of Gray/Jackson 11 and 12. This represents 11,204 net usable square feet of space. There will be six large, open laboratories of approximately 800 - 1,000 square feet. Each lab will accommodate six to ten investigators. Two additional, smaller laboratories for bacteria research will be designated P-2 for cultures of viable organisms containing recombinant DNA molecules. One tissue culture lab for four researchers on plant materials will be designated P-3 for cultures of viable organisms containing recombinant DNA molecules. A conference room/library will have the flexibility to handle meetings of up to 25 people at a table or 50 people in rows of chairs for seminars. One kitchen/glasswashing room will take care of the clean and soiled glassware for both floors. Support facilities on each floor will include a darkroom, warm and cold rooms and an equipment room for high-speed centrifuges and freezers. Space will be available on each floor for electrophoresis

and gel-running. There will be a total of fifty (50) people working on both floors. In an adjacent building there will be a greenhouse for the controlled propagation of plant materials.

## EXHIBIT B

### Proposed Permanent Research Facilities for the Department of Molecular Biology

The New Research Building will consist of a new building of not more than ten floors to be built by MGH on the MGH grounds and financed by a loan obtained by MGH from the Massachusetts Health and Education Facilities Administration. Upon completion of the New Research Building, the Department of Molecular Biology will occupy the upper four floors, totalling approximately 30,000 net usable square feet. There will be a series of large, open laboratories of 800 to 1,000 square feet. Each lab will accommodate six to ten investigators in animal, bacteria and plant tissue research. A number of smaller laboratories will be designated P-2 and P-3 for cultures of viable organisms containing recombinant DNA molecules. Conference room/library space will have the flexibility to handle groups of 75 to 100 people. Support facilities on each floor will include a darkroom, warm and cold rooms and an equipment room for high speed centrifuges and freezers. Space will be available for an electron microscope and computer graphics equipment. The facilities will be capable

of supporting a total of approximately one hundred (100) people. On the roof of the building there will be a greenhouse for controlled propagation of plant material.

## EXHIBIT C

### Allocation of Indirect Costs

MGH may allocate to the Department indirect costs on the same basis as indirect costs are allocated to research grants and contracts awarded to MGH by the U.S. Department of Health and Human Services ("DHHS"). Indirect costs rates are negotiated periodically with the DHHS and the on-site rates in effect from time to time for such grants and contracts shall be the rates in effect under this Agreement. The base for such rates shall also be as determined for DHHS grants and contracts. Fringe benefit rates are also approved by DHHS. MGH shall apply the DHSS fringe benefit rates in effect from time to time to the Department.

For the period October 1, 1980 through September 30, 1981 the on-site indirect cost rate for DHHS grants and contracts is 50.71%, and the base is direct salaries and wages including vacation, holiday and sick pay but excluding other fringe benefits. Fringe benefit rates in effect from March 1, 1980 through September 30, 1980 were as follows:

Professional staff 15.2%

Nonprofessional staff 13.1%

## THE MASSACHUSETTS GENERAL HOSPITAL

PARTICIPATION AGREEMENT

As a condition of my employment by The Massachusetts General Hospital (The Hospital) or my participation in any research (a) conducted by, under the auspices of, or pursuant to any agreement approved by The Hospital or (b) otherwise making substantial use of any facilities, materials, or other resources of The Hospital, and for other valuable consideration the receipt of which I hereby acknowledge, I hereby agree with The Hospital that, as to every discovery or invention (together hereinafter referred to as Invention) which, individually or jointly with others, I shall conceive or first reduce to practice during the course of such employment or participation:

1. I shall, in writing and reasonable detail, promptly disclose the Invention to the Director of The Hospital's Office of Technology Administration (Bartlett Hall, Third Floor; 726-2128);
2. In accordance with instructions from the said Director and at no expense to me, I shall execute and deliver such assignment of the Invention and other documents, and shall take all such other action pertaining to the Invention, as the Director may request of me in writing at any time once or oftener; and
3. I shall fully comply with The Hospital's Patent Policies and Procedures and Statement of Policy on Consulting Agreements (a copy of each of which is attached hereto and made a part hereof) and every obligation of The Hospital which shall apply to me under any grant or agreement providing support for research.

As a further condition of such employment or participation in such research, I also agree to file with the Director a complete and true copy of every agreement, if any, (1) to which I am party on the date hereof and (2) pursuant to which I am providing or shall provide consulting services which may materially relate to or draw on work (a) which I have done, am doing, or expect to do within the scope of my employment by The Hospital and (b) for which I have made, am making, or expect to make substantial use of facilities, materials, or other resources furnished by or through The Hospital.

Investigator:

\_\_\_\_\_  
Date

STATEMENT OF POLICY  
ON  
CONSULTING AGREEMENTS

The following Statement of Policy on Consulting Agreements has been adopted by the Trustees upon the recommendation of their Committee on Research and Committee on Patents. The Statement's purpose is (1) to protect the academic freedom traditional within The General Hospital, (2) to assist The Hospital's investigators (Investigator) and The Hospital itself in meeting their respective contractual responsibilities for research being carried on in normal course at The Hospital, and (3) to guide Investigators in evaluating invitations to provide compensated consulting services outside the scope of their employment by The Hospital or to accept additional compensation for services within or incidental to the scope of such employment (Consulting Agreement).

1. Such an invitation frequently offers the Investigator an opportunity to enlarge his\* scientific knowledge and perspectives as well as additional remuneration. Thus, such invitations are welcome.

2. However, occasionally:

- a. The services contemplated by the proposed Consulting Agreement may materially relate to or draw on work (i) which the Investigator has done, is doing, or expects to do within the scope of his employment by The Hospital and (ii) for which he has made, is making, or expects to make substantial use of facilities, materials, or other resources furnished by or through The Hospital;
- b. Acceptance of the invitation may impose explicit or implicit restrictions on the freedom of the consulting Investigator (Consultant) to communicate with his colleagues at The Hospital about his consulting work, to publish reports on such work, to establish rights to own and use the fruits of the work, or to patent discoveries and inventions resulting from it -- i.e., restrictions on his entitlement to all or any of the foregoing academic freedom and intellectual property; and
- c. Such restrictions may impinge on rights and duties of both The Hospital and fellow Investigators of the Consultant at The Hospital, including obligations owed to sponsors of research already under way or contracted to be conducted at The Hospital.

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\*Includes the feminine gender throughout.

3. Thus, before accepting any proposed Consulting Agreement which shall require analysis of the possibility that any of the considerations noted in the foregoing Paragraph 2 may have application to him, every Investigator shall submit such proposal to the Director, Office of Technology Administration, (Director) and request that the Director (a) review the proposed agreement, (b) advise the Investigator as to its consonance with this Statement of Policy, and (c) if the Investigator shall so further request, assist him in negotiating and drafting appropriate revisions of the proposal. In so doing, the Investigator may delete from the document all financial terms specified therein.

4. Whenever, following such submission and review, the Investigator and the Director shall agree on the necessity of addressing any of the said considerations, the resulting Consulting Agreement, if any, executed by the Investigator as Consultant shall, subject to such exception or exceptions as the Consultant and the Director shall jointly determine to be appropriate, (a) incorporate by reference and be subject to:

- i. Patent Policies and Procedures of The Massachusetts General Hospital in effect at the time being; and
- ii. All additional obligations, if any, which the Consultant shall have at the time being under either or both of (aa) the patent policies of any institution other than The Hospital and (bb) any prior undertaking to conduct research, whether for The Hospital, pursuant to another Consulting Agreement, or otherwise; and

(b) impose no restriction on the freedom of the Consultant to discuss and disclose by publication or otherwise any research by him which shall make substantial use of any facilities, materials, or other resources furnished by or through The Hospital.

THE MASSACHUSETTS GENERAL HOSPITAL

PATENT POLICIES AND PROCEDURES

1.01 Basic Objectives. From time to time patentable discoveries or inventions are products of clinical, research, and educational activities, or any of them, undertaken under the authority and conventions of The Massachusetts General Hospital, excluding its McLean Hospital Division, ("The Hospital") by persons who are members of its Professional Staff or among its employees or students. As a non-profit institution striving to alleviate human suffering by engaging in the investigation, prevention, and treatment of disease, The Hospital's basic objectives in responding to and dealing with such discoveries and inventions are:

- a. To promote their disclosure, dissemination, and utilization for the greatest possible public benefit;
- b. To protect the rights to patents which their inventors and The Hospital may have; and
- c. To provide for an equitable allocation of responsibilities and rewards among such inventors, The Hospital, and any organizations which may have sponsored and financed in whole or part any such activities ("Sponsor").

2.01 Patent Committee. The Committee on Patents ("Committee") shall consist of the General Director or his designee, the Director of Research Policy and Administration, the Chairman of the Committee on Research, a Trustee of The Hospital appointed for a term of three (3) years by the Chairman of The Hospital's Trustees ("Trustees" a member of the Corporation of The Hospital appointed for a term of three (3) years by the President of the Corporation, and, as non-voting ex officio members, the General Counsel or his designee and the Director of Fiscal Affairs or his designee. A quorum of the Committee shall be at least three (3) members eligible to vote; and, excepting adjournment, every action by the Committee shall require the presence of a quorum. The Committee's chairman shall be designated from time to time by the Chairman of the Trustees.

2.02 The powers and duties of the Committee shall be:

- a. On behalf of The Trustees, to interpret and apply these Policies and Procedures ("Policies");

- b. As of the close of each fiscal year of The Hospital, to report in writing to the Trustees on the activities of the Committee during such year, including the Committee's recommendations, if any, for amendment of these Policies; and
- c. Such additional powers and duties as the Trustees may at any time once or oftener assign to the Committee.

3.01 Coverage. These Policies shall apply to every member of the Professional Staff, employee, and student of The Hospital who shall conceive or reduce to practice, actually or constructively, ("conceive") any discovery or invention while engaged in activities for which he or she shall receive financial support from The Hospital or during which he or she shall make substantial use of any facilities, materials, or other resources of The Hospital (every such person hereinafter referred to as "Inventor").

4.01 Patent Disclosure. Every Inventor shall, in writing and reasonable detail, give the Committee prompt notice of any discovery or invention which he or she shall desire to have patented or shall believe or have reason to believe is patentable.

5.01 Patent Ownership. The rights of ownership to every discovery or invention by any Inventor shall be the property of The Hospital; provided, however, that:

- a. Within the one hundred and twenty (120) days next following disclosure under the preceding §4.01 by the Inventor of his or her discovery or invention (or such further period of time as may be agreed upon by the Inventor and the Committee), the Committee shall determine, and advise the Inventor in writing, whether such rights shall be retained by The Hospital or shall be released to the Inventor;
- b. The rights of ownership to every discovery or invention conceived by any member of The Hospital's Professional Staff or any of its employees or students while engaged in activities for which he or she shall not receive financial support from The Hospital or during which he or she shall not make substantial use of any facilities, materials, or other resources of The Hospital shall be the property of such person;

- c. The rights of ownership to every discovery or invention conceived during activities conducted pursuant to any agreement between The Hospital and any Sponsor shall be determined in accordance with such agreement; and
- d. All disagreements over the rights of ownership to any discovery or invention not resolved by the Committee shall be referred to the Trustees for determination.

6.01 Seeking a Patent. Whenever the Committee shall determine to seek the patenting of any discovery or invention to which The Hospital shall have rights of ownership in whole or part, (a) The Hospital shall, without expense to the Inventor, provide such professional services as it shall deem to be necessary or desirable for such purpose and (b) the Inventor shall cooperate fully in such effort, including his or her execution of all necessary or desirable agreements, applications, and other forms and instruments. If at any time subsequently The Hospital shall terminate its effort to seek such patent, it shall promptly give written notice thereof to the Inventor, who thereupon shall be free at his or her expense to seek, develop, license, and otherwise use the patent.

7.01 Promotion and Licensing. In interpreting and applying these Policies, the Committee shall, by such means as it shall deem to be most effective and appropriate in each case, act to bring to the public all discoveries and inventions to which The Hospital shall have rights of ownership in whole or part. Such means may include, but shall not be limited to, agreements for the development, patenting, promotion, licensing, and manufacturing of any such discovery or invention; and in every case The Hospital shall advise the Inventor of the terms of any such agreement.

8.01 Proceeds from Patents. Subject to approval or modification by the Trustees in any case following their consideration of the written recommendation or recommendations of the Committee, the Net Proceeds or Annual Net Royalty (each as defined below in this section) received by The Hospital from any patent or unpatented invention or discovery owned in whole or part by The Hospital shall be apportioned and paid over by The Hospital in accordance with the

following schedule:

Proceeds or Royalty (\$)	Percentage (%) to			
	<u>Inventor</u>	<u>Inventor's Laboratory</u>	<u>Inventor's Department</u>	<u>Hospital's General Research Fund</u>
First 50,000	35	35	15	15
Next 50,000 to 100,000	25	25	25	25
Over 100,000	15	15	35	35

provided, however, that the Committee may recommend in any case that more than one Inventor, laboratory, and department, or any of them, share in such apportionment; in which event (a) the payment apportioned under the said schedule to the Inventor shall be divided equally among all such Inventors and (b) the Committee shall specify each such laboratory and department, or either, and recommend the amount of payment to be made to each. Payment by The Hospital pursuant to any apportionment made to any Inventor in accordance with this §8.01 shall not be terminated for the reason that such Inventor shall cease to be a member of the Professional Staff, an employee, or a student of The Hospital. The terms "Net Proceeds" and "Annual Net Royalty," as used in and under these Policies, shall mean the net amount received by The Hospital in each fiscal year from the sale or licensing of any patent or unpatented invention or discovery owned in whole or part by The Hospital after deduction of all costs reasonably attributable to such patent, invention, or discovery, including without limitation any expense of patent prosecution and interference, litigation, and marketing.

9.01 Sponsors; Other Organizations. If and when any conflict shall arise between these Policies and any condition or conditions of (a) any proposed grant from or contract with any organization offering to act as a Sponsor or (b) the patent policies and procedures of any organization to which any Inventor shall have any obligation by virtue of any joint appointment or any affiliation or consulting agreement, such conflict shall be referred to the Committee. Following consideration of the conflict and such negotiations, if any, as the Committee shall deem to be warranted, the Committee shall, subject to the approval of the Trustees, determine and give appropriate notice of The Hospital's position in the matter.

10.01 Release of Rights of Ownership. Subject to the approval of the Trustees, the Committee may, for reasons and upon terms deemed to be satisfactory by it, release on behalf of The Hospital at any time any patent to its Inventor.