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To the extent authorized, please consider the use of voice mail, e-mail, and facsimile transmissions to the maximum extent practicable. Please do not fax lengthy documents, or grant applications.

This announcement will be available on one of two Internet sites on the publication date: CDC's home page at <http://www.cdc.gov>, or at the Government Printing Office home page (including free access to the Federal Register) at <http://www.access.gpo.gov>.

Dated: June 11, 1996.

Joseph R. Carter,

Acting Associate Director for Management and Operations, Centers for Disease Control and Prevention (CDC).

[FR Doc. 96-15375 Filed 6-17-96; 8:45 am]

BILLING CODE 4163-18-P

National Institutes of Health

Licensing Opportunity and/or Opportunity for a Cooperative Research and Development Agreement (CRADA) for the Scientific and Commercial Development of Novel Heparin-Binding Peptides

AGENCY: National Institutes of Health, Public Health Services, DHHS.

ACTION: Notice.

SUMMARY: The National Institutes of Health is seeking licensees and/or CRADA partners for the further development, evaluation, and commercialization of novel heparin-binding peptides. The inventions claimed in the patent applications referenced below are available for either exclusive or non-exclusive licensing (in accordance with 35 U.S.C. 207 and 37 CFR Part 404) and/or further development under a CRADA for clinical and research applications described below in Supplementary Information.

Heparin- and Sulfatide-Binding Peptides From the Type I Repeats of Human Thrombospondin and Conjugates Thereof

DD Roberts, PJ Browning, J Bryant, JK Inman, HC Krutzsch, N Guo (NCI)

Serial No. 08/487,568, filed 07 Jun 95, which is a CIP of

Serial No. 08/215,085, filed 21 Mar 94, which is a CIP of

Serial No. 07/801,812, which issued as U.S. Patent No. 5,357,041 on 18 Oct 94.

To expedite the research, development, and commercialization of these compounds, the National Institutes of Health is seeking a CRADA with a pharmaceutical or biotechnology company in accordance with the regulations governing the transfer of Government-developed agents. Any proposal to use or develop these compounds will be considered.

ADDRESSES: CRADA proposals and questions about this opportunity should be addressed to: Dr. Gary D. Colby, Office of Technology Development, National Cancer Institute, Executive Plaza South, Suite 450, 6120 Executive Boulevard MSC 7182, Bethesda, MD 20892-7182; telephone: 301/496-0477; fax: 301/402-2117.

Licensing proposals and questions about this opportunity should be addressed to: Ms. Carol Lavrich, Technology Licensing Specialist, Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852-3804; telephone: 301/496-7735, ext. 287; fax: 301/402-0220.

Information about the patent applications and pertinent information not yet publicly described can be obtained under a Confidential Disclosure Agreement. Respondees interested in licensing the invention(s) will be required to submit an Application for License to Public Health Service Inventions. Respondees interested in submitting a CRADA proposal should be aware that it may be necessary to secure a license to the above patent rights in order to commercialize products arising from a CRADA.

DATES: There is no deadline by which license applications must be received. CRADA proposals must be received on or before September 16, 1996.

SUPPLEMENTARY INFORMATION: These inventions identify a family of related peptides, peptide analogs, and peptidomimetics useful for blocking or modifying the biological activities of heparin, sulfatides, fibronectin, fibroblast growth factor and transforming growth factor- β (TGF β). Among the activities exhibited by compounds within this family of agents are:

- Inhibition of tumor cell growth, including inhibition of breast tumor growth in a mouse xenograft model;
- Inhibition of Kaposi's Sarcoma (SK) cell proliferation and migration *in vitro* and KS-like lesion formation *in vivo*;
- Inhibition of endothelial and breast carcinoma cell proliferation, adhesion, and motility *in vitro*;

- Inhibition of angiogenesis *in vivo*;
- Specific, high affinity binding to heparin and related sulfated glycoconjugates, including preventing interaction with adhesion molecules, growth factors, cells, and heparin-dependent enzymes; and
- Activation of latent TGF β .

The compounds within this family of agents are based upon functional sequences from the three type I repeats of human endothelial cell thrombospondin. The inventions identify particular peptides, analogs, and peptidomimetics that have particularly advantageous properties such as increased physiological stability, enhanced activity, lack of electrostatic charge, and increased solubility. The inventions also describe unique approaches to constructing water-soluble conjugates which exhibit a number of interesting and useful biological activities.

It is expected that the high potency of these agents will lower the effective dose needed, and, subsequently, will reduce the immunological response against the peptides and the risks of toxicity. Among the diseases for which these agents may prove to be particularly useful therapeutic agents are:

- Kaposi's sarcoma
- Breast carcinoma
- Melanoma
- Other epithelial cancers
- Other diseases involving abnormal vascular proliferation

The inventors of these agents seek collaborators for their ongoing research and development efforts. Two research projects for which collaborators are particularly sought involve investigation of means of controlling angiogenesis and investigation of means for modulating the activity of TGF β , particularly to control fibrosis, using the agents described above.

Thrombospondin has been identified as an anti-angiogenic factor in human epithelial tissue. Certain agents described above have shown particular utility for inhibition of pathological angiogenesis *in vivo*. These agents have been engineered to decrease both proteolytic degradation and the rapidity of their clearance from the bloodstream and to increase their biological activity. These agents have been shown to influence tumor cell adhesion and growth *in vitro* and *in vivo*. Other peptides have been shown to inhibit tumorigenesis and metastasis *in vivo*. Further development of agents, and their application in therapeutic capacities, is planned.

The antiproliferative activities of certain agents upon epithelial and breast

carcinoma cells has demonstrated to be independent of latent TGF β activation. Other agents, however, have been shown to activate latent TGF β . TGF β -activating agents also exhibit anti-tumor activity *in vivo*. Further development of TGF β -modulating agents, particularly those useful for control of fibrosis, is planned.

Particularly sought are companies dedicated to the development of small therapeutic molecules, such as peptides and their analogs. Collaborators should have particular in-house expertise relating to peptide research and development. It is anticipated that fruitful collaboration will result from sustained and meaningful contribution on the part of the collaborator.

The CRADA aims will include optimizing peptide and peptidomimetic activity *in vitro* and *in vivo*, preclinical development of the synthetic peptides and mimetics, and clinical studies as warranted. The CRADA partner will enjoy the benefit of a right of first refusal for a license (on a reasonable commercial terms) to government-owned rights in any invention arising within the scope of the CRADA. Furthermore, the CRADA partner will be responsible for reimbursement of government expenses for patenting any resulting inventions during the term of the CRADA.

The role of the National Cancer Institute will include the following:

1. The government will continue *in vitro* and *in vivo* preclinical development of the peptides and mimetics as inhibitors of tumor growth and metastasis and as modulators of TGF- β activity.

2. The government will provide available data and expertise in structure-function relationships and conformational analysis of the active peptides and peptidomimetics. These data will be evaluated jointly in order to assess an efficient research path.

3. As appropriate, the government will initiate collaborative clinical trials under its extramural clinical trials network, thus ensuring the clinical evaluation of the compounds.

The role of the collaborator will include the following:

1. Prepare and characterize GMP quality nonmetabolizable analogs (as determined by both parties) of the active peptides and provide these to the NCI for characterization as angiogenesis and metastasis inhibitors or as modulators of TGF- β activity.

2. Provide funds for preclinical development of the peptides *in vitro* and for screening activities in appropriate animal models.

3. Collaborate in the planning and support for clinical development leading to FDA approval and marketing.

Selection criteria for choosing the CRADA partner will include, but are not limited to, the following:

1. Experience in preclinical and clinical drug development.

2. Experience and ability to produce, package, market, and distribute pharmaceutical products, particularly peptides and peptide analogs, in the United States.

3. A willingness to cooperate with the Public Health Service in the collection, evaluation, publication, and maintenance of data from clinical trials of investigational agents.

4. Willingness to share the costs associated with the development of the peptides and mimetics. These costs include acquisition of synthesis or both of the peptides and mimetics in amounts adequate for clinical trials and marketing.

5. Agreement to be bound by DHHS rules and regulations regarding the use of human subjects in clinical investigations, intellectual property rights, ethical treatment of animals, and randomized clinical trials.

6. The aggressiveness of the development plan, including the appropriateness of milestone and deadlines for preclinical and clinical development.

7. Agreement with provisions for equitable distribution of patent rights to any inventions developed under the CRADA(s). Generally, the rights of ownership are retained by the organization which is the employer of the inventor, with an irrevocable, non-exclusive, royalty-free license to the Government (when a company employee(s) is the sole inventor) or a first option to negotiate an exclusive or non-exclusive license to the company on terms that are appropriate (when the Government employee(s) is the sole or a joint inventor).

Dated: June 7, 1996.

Barbara M. McGarey,
Deputy Director, Office of Technology
Transfer.

[FR Doc. 96-15363 Filed 6-17-96; 8:45 am]

BILLING CODE 4140-01-M

Prospective Grant of Exclusive License: Gossypol Acetic Acid for the Treatment of Cancer

AGENCY: National Institutes of Health, Public Health Service, DHHS.

ACTION: Notice.

SUMMARY: This is notice in accordance with 35 U.S.C. 209(c)(1) and 37 CFR

404.7(a)(1)(I) that the National Institutes of Health (NIH), Department of Health and Human Services, is contemplating the grant of an exclusive world-wide license to practice the inventions embodied in U.S. Patent No. 5,385,936 and U.S. Patent Applicant No. 08/379,872 to Cary Medical Corporation of Great Falls, Virginia. U.S. Patent No. 5,385,936 is directed toward a method of treating cancers using Gossypol Acetic Acid (GAA). U.S. Patent Application No. 08/379,872 is directed toward the use of Gossypol for the treatment of cancer. Patent rights in these inventions have been assigned to the United States of America.

The prospective exclusive license will be royalty-bearing and will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7. The prospective exclusive license may be granted unless within sixty (60) days from the date of this published notice, NIH receives written evidence and argument that establishes that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7.

Gossypol is a biphenolic compound derived from crude cottonseed oil that has been widely used in China as a male contraceptive. Clinical trials have demonstrated GAA's efficacy against gliomas and adrenal cancer. Clinical trials are planned or underway for the use of GAA in breast and prostate cancer. GAA exhibits low toxicity relative to other chemotherapeutic agents and does not appear to cause myelosuppression, significant hair loss, cardiac failure or neurotoxicity. The milder side effects of the use of GAA include mild fatigue, muscle tremor, dry mouth, dry skin, and occasional nausea. Patients treated with GAA, therefore, may be able to continue normal activities.

ADDRESSES: Requests for a copy of the issued patent, patent application, inquiries, comments, and other materials relating to the contemplated license should be directed to: Allan Kiang, Technology Licensing Specialist, Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852-3804; Telephone: (301) 496-7735 ext. 270; Fax: (301) 402-0220. A signed Confidentiality Agreement will be required to receive copies of the patent application. Applications for a license in the field of use filed in response to this notice will be treated as objections to the grant of the contemplated license. Only written comments and/or applications for a license which are received by the NIH