

promoter which controls the expression of a regulatory transcription factor and a second inducible promoter which controls the expression of the gene of interest. The preferred gene of interest encodes an isoform of TGF- β such as TGF- β_1 or TGF- β_3 . The isoform of TGF- β does not have to be hTGF- β and can be a latent or active isoform of TGF- β . The preferred inducible promoter is TRE-CMV which can be induced using doxycycline. The usefulness of the composition for treating autoimmune diseases is demonstrated in the application in a murine model of inflammatory bowel disease in which intestinal inflammation was abrogated by the administration of a plasmid vector encoding active TGF- β . The composition may be administered by a variety of delivery systems and intranasal delivery is exemplified.

Serum Free Medium

F Luyten, L Erhlicher (NIDCR)
Serial No. 09/468,562 filed 21 Dec 1999
Licensing Contact: Susan S. Rucker;
301/496-7056 ext. 245; e-mail:
ruckers@od.nih.gov

The technology described and claimed in this application relates to the development of a serum-free medium which is particularly useful for the culture, both growth and expansion, of chondrocytes. More particularly, the medium allows chondrocytes to maintain their cartilaginous phenotype. Chondrocytes cultured in this medium may be used to repair joints having cartilage damage from diseases such as rheumatoid arthritis.

This work has been published, in part, at L Erhlicher, et al. "Presence of cartilage-derived morphogenetic proteins in articular cartilage and enhancement of matrix replacement in vitro" *Arthritis Rheum.* 1998 Feb;41(2):263-73. The material found in the patent application has been published as WO 98/59035 (Dec 30, 1998).

PHS also owns additional intellectual property, related to cartilage derived morphogenetic proteins 1 and 2 (CDMP-1/GDF5 and CDMP-2/GDF6) which may be used in conjunction with this technology. The work related to CDMP-1 and CDMP-2 has been published as WO 96/14335 (May 17, 1996) and at originally at Chang, *et al.*, "Cartilage-derived morphogenetic proteins. New members of the transforming growth factor-beta superfamily predominantly expressed in long bones during human embryonic development" *J Biol Chem.* 1994 Nov 11;269(45):28227-34.

Mutant of RAD51 Gene and Its Use in the Diagnosis of Predisposition to Breast Cancer

Jeffery P. Struewing, Weiching Wang (NCI)
DHHS Reference No. E-231-99/0 filed 10 Sep 1999
Licensing Contact: Vasant Gandhi; 301/496-7056 ext. 224; e-mail:
gandhiv@od.nih.gov

This invention relates to a mutant of the RAD51 gene and its use in diagnosing individuals predisposed to breast cancer involving BRCA1 and/or BRCA2. The mutant contains a guanine-to-cytosine transversion at nucleotide position 135 in the 5' untranslated region of the RAD51 gene. The invention relates to the nucleotide sequence of the mutant RAD51 gene, associated vector constructs and host cells, and diagnostic methods. Epidemiological and in vitro biochemical characterization studies are in progress.

Dated: July 31, 2000.

Jack Spiegel,

Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health.

[FR Doc. 00-20036 Filed 8-8-00; 8:45 am]

BILLING CODE 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

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

ACTION: Notice.

SUMMARY: The inventions listed below are owned by agencies of the U.S. Government and are available for licensing in the U.S. in accordance with 35 U.S.C. 207 to achieve expeditious commercialization of results of federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing.

ADDRESSES: Licensing information and copies of the U.S. patent applications listed below may be obtained by writing to the indicated licensing contact at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852-3804; telephone: 301/496-7057; fax: 301/402-0220. A signed Confidential Disclosure Agreement will

be required to receive copies of the patent applications.

Mouse Strain Deficient for the Protein MT1-MMP (MMP14)

Kenn Holmbeck *et al.* (NIDCR)
DHHS Reference No. E-191-00/0
Licensing Contact: Marlene Shinn; 301/496-7056 ext. 285; e-mail: shinnm@od.nih.gov

Matrix metalloproteinases (MMPs) constitute a family of zinc endopeptidases that are capable of degrading most of the structural components of the extracellular matrix. The NIH announces a new mouse model deficient in MT1-MMP activity. This mouse model demonstrates the necessity of MT1-MMP for normal development of cranial bones, long bones and general housekeeping of connective tissues throughout the body. Since studies in the pharmaceutical industry are currently aiming at inhibiting the MMP family at large for purposes of cancer and arthritis treatment, this mouse model provides a valuable demonstration of the possible side effects that such treatment may lead to. As such this mouse model may also provide a test bed for the substances that can alleviate the unwanted side effects of MMP inhibitor treatments.

HIV Protease Inhibitors, Ritonavir and Saquinavir Are Potent Inhibitors of Calcium Activated Neutral Peptidases, Calpains

Paolo DePetrillo, Wenshuai Wan (NIAAA)
DHHS Reference Number E-041-00/0 filed 04 May 2000
Licensing Contact: John Rambosek, Ph.D.; 301/496-7056 ext. 270; e-mail: rambosej@od.nih.gov

This invention discloses a novel use for compounds that are inhibitors of the HIV Protease: specifically, the invention shows that HIV protease inhibitors are also potent inhibitors of Calcium Activated Neutral Peptidases (Calpain). Activation of calpain plays a central role in tissue destructive processes following tissue trauma caused by, for example, stroke, heart attack, brain trauma, and spinal cord injury. Thus specific inhibition of calpain is an important therapeutic target in these disease processes. The estimated total market for these classes of therapeutic agents is on the order \$500 million to 1 billion annually. The inventor has specifically demonstrated that *in vitro* the HIV protease inhibitors ritonavir and saquinavir are also potent inhibitors of calpain. This technology has a variety of practical applications: (1) Existing HIV

proteases may be used as calpain inhibitors; (2) Existing HIV protease inhibitors which are FDA approved drugs will require less studies to develop as therapeutics; (3) HIV protease inhibitors are small molecules with oral availability; (4) Other lead compounds developed as HIV protease inhibitors, but not commercialized, may be reevaluated as calpain inhibitors; (5) HIV protease inhibitors used as calpain inhibitors will not require chronic administration; and (6) calpain inhibitors may address therapeutic areas where there are not current effective therapies.

A Provisional Patent Application Serial Number 60/202,378 has been filed for this technology. It is available for licensing through a DHHS Patent license.

Synthesis of Soluble Magnetodendrimer

Jeff W. Bulte (CC), Trevor Douglas
Serial No. 60/193,360 filed 31 Mar 2000
Licensing Contact: Norbert Pontzer; 301/
496-7735, ext. 284; e-mail:
pontzern@od.nih.gov

The invention provides a soluble composite material comprising an organic polymer and nanoparticles of a magnetic iron oxide. Poly(amidoamine) (PAMAM) dendrimers aggregate with magnetic particles in an oligocrystalline structure which makes them extremely magnetic and soluble in solution. These superparamagnetic nanoparticles are readily taken up by cells. Because the preparation is superparamagnetic rather than ferromagnetic there is a very large relaxation effect and hysteresis is not shown. The combination of solubility, cellular uptake and strong paramagnetic properties give these novel magnetodendrimers a number of potential uses.

Magnetodendrimers have a high non-specific affinity for cellular membranes and will label cells by simple *in vitro* incubation regardless of the cells origin or surface proteins. After uptake of magnetodendrimer, cells can be readily separated by simple permanent magnets within seconds. When used as a magnetic resonance imaging (MRI) contrast agent, the magnetically labeled cells allow non-invasive monitoring of the temporal spatial dynamics of a wide variety of cell transplants. After incubation with magnetodendrimer, cellular relaxation enhancement is 3–5 times higher than earlier approaches. For example, the magnetically labeled cells can be injected into a patient undergoing stem cell therapy to follow the migration, distribution and integration of new tissue. Magnetic dendrimers could also be injected into tumors and other areas to directly label

cells and tissues *in vivo*. Such uses include cancer hyperthermia therapy, ultrasound imaging-microwave radiation, and nuclear isotope imaging using ^{59}Fe preparations. The magnetodendrimer could be attached to therapeutic compounds or other clinically relevant molecules for research, diagnostic or therapeutic purposes.

Fluorescent Magnesium Indicators

Robert London, Pieter Otten, Louis A. Levy (NIEHS)
DHHS Reference Number E-067-00/0
filed 24 March 2000
Licensing Contact: John Rambosek; 301/
496-7056 ext. 270; e-mail:
rambosej@od.nih.gov

Links between magnesium status and diseases such as ischaemic heart disease, hypertension, atherosclerosis, osteoporosis, migraine headaches, and other chronic diseases have been reported. These correlations have been difficult to confirm, however, mainly because of poor methods for determining free magnesium levels. This invention discloses new compounds that are fluorescent indicators for free (ionized) magnesium—the physiologically important form of magnesium. These compounds are analogs of fluoroquinolone antibiotics. Unlike other methods and indicators, they show a particularly high degree of specificity for Mg^{2+} versus Ca^{2+} . They represent an exciting improvement over other methods and indicators used to measure Mg^{2+} because they significantly increase the ability to accurately measure intra and extracellular Mg^{2+} levels in a wide variety of cells, tissues, and fluids under conditions where calcium is elevated. These compounds will be important research reagents, and have the potential to be very useful as diagnostic reagents in a variety of therapeutic areas.

Methods for Wound Treatment

Sharon M. Wahl *et al.* (NIDCR)
DHHS Reference No. E-131-99/0 filed
01 Mar 2000
Licensing Contact: Marlene Shinn; 301/
496-7056 ext. 285; e-mail:
shinnm@od.nih.gov

Impaired wound healing states in the elderly have lead to major problems in terms of morbidity and mortality, affecting over four million U.S. citizens per annum and costing over 9 billion dollars. NIH investigators have recently found that Secretory Leukocyte Protease Inhibitor (SLPI) plays an important and specific role in cutaneous wound

healing. SLPI is an inhibitor of serine proteases, and evidence demonstrates a requirement for SLPI as an anti-proteolytic defense against elastase and possibly additional tissue degradative enzymes and is consistent with excess elastolytic activity in pathologic, nonhealing wounds and venous ulcers. Our researchers have found that the absence of SLPI causes delayed or aberrant wound healing, an increased and prolonged inflammatory response, enhanced elastase activity, and delayed matrix accumulation in mice.

This new technology provides an improved method for treating diseases or disorders involving tissue destruction. The use of SLPI in such treatment provides a combination of advantages, including improved anti-bacterial, anti-viral, anti-fungal, and anti-inflammatory functions. SLPI also provides a number of relevant functions that accelerate the wound healing process of a variety of tissues, including skin, mucosal surfaces, and joints. Additionally, our investigators have developed a SLPI gene knock out mouse which is a useful animal model to study the functions of SLPI in the host innate immune response.

Inhibition of Cell-Mediated Immunity by Inhibition of fMLP Receptor Function by Bile Acids

Joost J. Oppenheim *et al.* (NCI)
DHHS Reference No. E-044-00/0 filed
03 Dec 1999
Licensing Contact: Marlene Shinn; 301/
496-7056 ext. 285; e-mail:
shinnm@od.nih.gov

It is well known that patients with biliary cholestatic diseases are susceptible to complications of systemic infection and endotoxemia, which may be attributable to impaired host immunity. Extensive studies in the past have shown that some bile acids, particularly chenodeoxycholic acid (CDCA), one of two major human primary bile acids, possessed immunosuppressive properties including inhibiting the production of Interleukin 1 (IL-1), IL-6 and tumor necrosis factor- α (TNF- α) by monocytes. The precise mechanistic basis for the immune suppression was unclear.

The NIH announces the discovery that deoxycholic acid and many of its naturally occurring variants block the function of formyl peptide receptors by reversibly blocking the ligand-binding site on the receptors. The formyl peptide receptors are responsible for inducing many cell types to migrate to sites of inflammation and infection and have been shown to participate in host defense against microbial agents, the formation of atherosclerosis plaques,

granulomas, autoimmune disease and possibly Alzheimer's disease. In particular, our researchers have shown that co-incubation of the bacterially derived N-formyl peptide (fMLP) with major components of human bile, namely dexocholic acid or chenodeoxycholic acid, inhibited chemotaxis and binding by monocytes that act as phagocytic leukocytes in cell-mediated immunity. Deoxycholic acid and its variants therefore have potential usefulness as anti-inflammatory agents with a broad range of potential applications.

Dated: July 31, 2000.

Jack Spiegel,

Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health.

[FR Doc. 00-20037 Filed 8-8-00; 8:45 am]

BILLING CODE 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

[Docket No.]

National Human Genome Research Institute; Notice of Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of a meeting of the National Advisory Council for Human Genome Research.

The meeting will be open to the public as indicated below, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Advisory Council for Human Genome Research.

Date: September 11-12, 2000.

Open: September 11, 2000, 8:30 am. to 12:15 p.m.

Agenda: Discussions of the activities of the National Human Genome Research Institute.

Place: National Institutes of Health, Natcher Building, Conference Room, E1 & E2, 45 Center Drive, Bethesda, MD 20892.

Closed: September 11, 2000, 12:15 pm. to 2:15 pm.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1 & E2, 45 Center Drive, Bethesda, MD 20892.

Open: September 11, 2000, 2:15 pm. to Recess.

Agenda: Discussions of the activities of the National Human Genome Research Institute.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1 & E2, 45 Center Drive, Bethesda, MD 20892.

Closed: September 12, 2000, 8:30 am to Adjournment.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1 & E2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Elke Jordan, PHD, Deputy Director, National Human Genome Research Institute, National Institutes of Health, PHS, DHHS, 31 Center Drive, Building 31, Room 4B09, Bethesda, MD 20892, 301 496-0844. (Catalogue of Federal Domestic Assistance Program Nos. 93.172, Human Genome Research, National Institutes of Health, HHS)

Dated: August 1, 2000.

LaVerne Y. Stringfield,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. 00-20041 Filed 8-8-00; 8:45 am]

BILLING CODE 4140-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Neurological Disorders and Stroke; Notice of Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of a meeting of the National Advisory Neurological Disorders and Stroke Council.

The meeting will be open to the public as indicated below, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material,

and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Advisory Neurological Disorders and Stroke Council.

Date: September 14-15, 2000.

Open: September 14, 2000, 8:30 a.m. to 3:30 p.m.

Agenda: Report by the Director, NINDS; Report by the Director, Division of Extramural Research; and other administrative and program developments.

Place: National Institutes of Health, 9000 Rockville Pike, Building 31, Conference Room 10, Bethesda, MD 20892.

Closed: September 14, 2000, 3:30 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 9000 Rockville Pike, Building 31, Conference Room 10, Bethesda, MD 20892.

Open: September 15, 2000, 8:00 a.m. to 10:00 a.m.

Agenda: Meeting with NIMH Council to discuss collaborative research.

Place: National Institutes of Health, Building 1, Wilson Hall, 9000 Rockville Pike, Bethesda, MD 20892.

Closed: September 15, 2000, 10:00 a.m. to 12:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 9000 Rockville Pike, Building 31, Conference Room 10, Bethesda, MD 20892.

Contact Person: Constance W. Atwell, PHD, Associate Director for Extramural Research, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Neuroscience Center, 6001 Executive Blvd., Suite 3309, MSC 9531, Bethesda, MD 20892-9531, (301) 496-9248.

(Catalogue of Federal Domestic Assistance Program Nos. 93.853, Clinical Research Related to Neurological Disorders; 93.854, Biological Basis Research in the Neurosciences, National Institutes of Health, HHS)

Dated: August 1, 2000.

LaVerne Y. Stringfield,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. 00-20038 Filed 8-8-00; 8:45 am]

BILLING CODE 4140-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Drug Abuse; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of the following meeting.