The awardee will have an option to negotiate an exclusive license to market and commercialize any new antibodies and tests developed within the scope of the research plan.

Role of the NIEHS

1. Provide expression vectors and recombinant protein as antigen for antibody production.
2. Work cooperatively with the company(s) to test antibodies produced for their ability to detect the KAI1 protein and determine its utility in cancer prognosis.

Role of the CRADA Partner

1. Assist in the isolation of recombinant proteins.
2. Develop antisera and monoclonal antibodies to the KAI1 gene.
3. Test the ability of antibodies to detect expression of the protein in histological sections.
4. Develop in cooperation with the NIEHS diagnostic tests for malignant cancers on the basis of KAI1 expression.

Selection criteria for choosing the CRADA partner(s) will include, but will not be limited to, the following:

1. Experience in monoclonal antibody and antisera production.
2. Capability to develop diagnostic tests for screening histological sections.

Dated: July 6, 1995.

Barbara M. McGarey,

Deputy Director, Office of Technology Transfer.

[FR Doc. 95–17779 Filed 7–19–95; 8:45 am]

BILLING CODE 4140–01–P

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

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 U.S. 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 Mr. Arthur J. Cohn, J.D., 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 284; fax 301/402–0220). A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

Ultraselective Opioidmimetic Peptides and Pharmacological and Therapeutic Uses Thereof

Lazarus, L.H., Salvadori, S., Temussi, P.A. (NIEHS)
Filed 30 Nov 94
Serial No. 08/347,531

Opioids and opioid receptors mediate a variety of effects in mammalian physiology including the production of analgesia, modification of the secretion of circulating peptide hormones, alteration of body temperature, depression of respiration, gastrointestinal function, and immune system activities. Opioids also have a wide range of therapeutic utilities, such as treatment of opiate and alcohol abuse, neurological diseases, neuropeptide or neurotransmitter imbalances, neurological and immune system dysfunctions, graft refections, pain control, shock and brain injuries. Various subclasses of opioid receptors are implicated in any particular physiological function or disease process. Accordingly, it would be desirable to have opioid drugs that exhibit specificity for one subclass of the receptor so as to avoid undesirable side effects during a therapeutic regimen. This invention provides novel opioidmimetic dipeptides, tripeptides and cyclic peptides which exhibit ultraselective specificity and potency for the δ opiate receptor. Additionally, methods of inducing analgesia and treating drug and alcohol addiction are provided. [*portfolio: Central Nervous System—Therapeutics*]

A Method Of Identifying CFTR-Binding Compounds Useful For Activating Chloride Conductance In Animal Cells

Pollard, H.B., Jacobson, K.B. (NIDDK)
Filed 22 Nov 94
Serial No. 08/343,714 (CIP of 07/952,965 issued as U.S. Patent 5,366,977)

Cystic fibrosis is the most common fatal genetic disease of Caucasians in the world today. The life expectancy of those affected with the disease is approximately 28 years. Cystic fibrosis affects some 30,000 children and young adults in the United States and approximately 24,000 children and young adults in Europe. Cystic fibrosis is caused by mutations in the cystic fibrosis transmembrane regulator (CFTR) gene. Chloride (Cl^-) and sodium transport across epithelial membranes of an individual afflicted with cystic fibrosis is abnormal. Many of the present efforts to combat the disease have focused on drugs that are capable of either activating the mutant CFTR gene product or otherwise causing additional secretion of Cl^- from affected cells. Antagonism of the A_1 adenosine receptor has been shown to result in stimulating Cl^- efflux from cystic fibrosis cells. Many of the drugs currently in use or under development function by antagonizing the A_1 adenosine receptor but lack specificity for the receptor and, thus, produce undesirable side effects. Likewise, antagonism of A_1 adenosine receptors probably will have an additional impact on an animal that is unrelated to the cystic fibrosis affliction. The present invention provides compositions and methods of identifying compositions that overcome these disadvantages, as well as methods of treating cystic fibrosis. The compounds provided activate impaired Cl^- conductance channels and exhibit high potency, low toxicity, and little or no specificity for adenosine receptors. [*portfolio: Internal Medicine—Therapeutics, pulmonary*]

Inhibiting Cell Proliferation By Inhibiting Mitogenic Activity Of Macrophage Migration Inhibitor Factor

Wistow, G.J., Paralkar, V. (NEI)
Filed 16 Nov 94
Serial No. 08/340,826

The control of cell growth is of interest in the understanding of normal physiological activity and pathological conditions such as cancer. Certain mechanisms of cell proliferation in cancer appear to mimic the growth-factor-induced mitogenic pathway. Peptide growth factors act by binding to receptors on the cell surface and inducing gene expression. This invention demonstrates that one of the genes induced by growth factors, macrophage migration inhibitory factor (MIF), is involved in cell proliferation and that inhibiting MIF expression in turn inhibits both peptide-growth-factor-induced and transformed cell proliferation. The invention provides methods for inhibiting cell growth by inhibiting the mitogenic activity of MIF in the cell. Such inhibition can be performed through providing the cell with a nucleic acid that inhibits MIF expression or through inhibiting MIF activity by hindering the binding of MIF to retinoblastoma protein. The invention also provides pharmaceutical compositions having an agent that inhibits the mitogenic activity of MIF in a cell and a pharmaceutically acceptable carrier. This invention would provide a means to inhibit growth factors in cancer cells *in vivo* and thereby prevent

their proliferation. The inhibition of MIF activity *in vitro* is useful to investigate the sequence of events comprising the cell cycle. Issuance of a patent on this invention is currently pending. [*portfolio: Gene-Based Therapies—Therapeutics, oligonucleotide-based therapies, antisense, sequences*]

Cell Tests For Alzheimer's Disease

Alkon, D., Etcheberrigaray, R., Kim, C., Han, Y., Nelson, T. (NINDS)
Filed 26 Sep 94
Serial No. 08/312,202 (CIP of 08/056,456)

Alzheimer's disease represents the fourth leading cause of death in the United States, killing over 100,000 annually, and afflicting some 4 million Americans. Various reports indicate that the incidence of Alzheimer's disease increases with age and estimate that the prevalence of Alzheimer's disease in people over 80 years of age is between 20 and 50%. Under currently available technology Alzheimer's disease can only be presumptively diagnosed by pathological examination of brain tissue during autopsy in conjunction with a clinical history of dementia. The present invention utilizes newly discovered differences between cells from healthy donors and those with Alzheimer's disease. In particular, differences in the levels of a memory associated GTP-binding protein between cells from health donors and Alzheimer's patients are assessed by immunoassay. Thus, the invention provides a quick and reliable test for assessing whether a patient is suffering from Alzheimer's disease. [*portfolio: Central Nervous System—Diagnostics, in vitro, other*]

Allelic Variation Of The Serotonin 5HT2C Receptor

Lappalainen, J., Linnoila, M., Goldman, D. (NIAAA)
Filed 21 Sep 94
Serial No. 08/310,271

An allelic variation of the serotonin 5HT2C receptor that is functionally different from the predominant wild-type receptor. One embodiment of this discovery relates to isolated DNA encoding that serotonin 5HT2C receptor wherein the DNA encodes a serine at amino acid position 23 of the receptor. The isolated DNA may, for example, be provided in a recombinant vector. Preferably the isolated DNA has the nucleic acid sequence of SEQ ID NO:1.

This invention may make it possible to find biochemical and genetic variables that predict vulnerability to psychiatric disorders, including antisocial personality, and therefore predict these behaviors and also facilitate implementation of preventative and therapeutic measures. The patent application is pending, and the technology is available through a non-exclusive license. [*portfolio: Central Nervous System-Research Tools and Reagents, receptors and cell lines*]

Sulfo Derivatives Of Adenosine

Jacobson, K., Maillard, M.C. (NIDDK)
Filed 21 Jul 94
Serial No. 08/278,704 (FWC of 07/914,428)

A newly-developed, novel class of adenosine compounds are valuable for the prevention or treatment of injuries related to oxygen deprivation, or ischemia. Adenosine has numerous physiologic roles in the body including increasing tissue oxygen supply. Certain compounds that bind to adenosine receptors in the body have been found to protect against ischemia-induced tissue injury. Previously, however, adenosine agonists that have been tested for treating or preventing such injuries have caused serious behavioral effects, making them too risky for use in humans. This new class of adenosine agonist are sulfo derivatives of adenosine and do not effectively cross the blood-brain barrier. Thus, they can be used effectively as adenosine agonists—especially in preventing ischemia-induced tissue damage—without the toxic side effects.

Stannylated 3–Quinuclidinyl Benzilates And Methods For Preparing *AQNB

Lee, K.S., He, X–S, Weinberger, D.R. (NIMH)
Filed 19 Apr 94
Serial No. 08/229,837

A unique method for synthesizing tomographic imaging agents has been developed that offers to significantly improve the use of tomographic imaging in studying the brain and other parts of the nervous system. Muscarinic cholinergic receptors (mAChrs) play a vital role in a number of psychological and behavioral responses including sleep, avoidance behavior, learning, and memory. Single-photon emission-computed tomography (SPECT) has emerged as a leading diagnostic tool for diagnosing and researching mAChr activity. At present, the potential of SPECT imaging of muscarinic receptors as a diagnostic and analytical tool has not been fully attained, primarily due to the high cost and difficulty of preparing the tomographic imaging agent *IQNB. This invention overcomes such limitations by halogenating, particularly iodinating, stannylated 3-quinuclidinyl benzilate compounds, which converts them to *AQNB (wherein *A is a halogen). The halogenation of stannylated 3-quinuclidinyl benzilates proceeds in as little as five minutes compared to up to an hour with previous methods. In addition, radiolabeling with this method produces yields of *AQNB as high as 80 percent. [portfolio: Central Nervous System—Research Tools and Reagents; Central Nervous System—Diagnostics]

Method Of Adenovirus-Mediated Cell Transfection

Seth, P., Crystal, R.G., Rosenfeld, M., Yoshimura, K., Jessee, J.A. (NHLBI)

Filed 4 Feb 94

Serial No. 08/191,669

Development of an efficient and less toxic method for adenovirus-mediated cell transfection offers to significantly improve efforts at correcting genetic disorders and other diseases through gene augmentation therapy. Adenoviruses are useful as a vector for gene therapy, since they do not require the host cell proliferation that is necessary to employ retroviral vectors. In addition, adenoviral vectors have low recombination event frequencies. Adenovirus exhibits tropism for the respiratory epithelium, and can infect almost every human tissue including lung, gastrointestinal, liver, brain, salivary glands, kidney, and other tissues. Therefore, adenoviruses are a useful tool in somatic gene therapy of many inheritable and metabolic diseases, particularly those of the lung and gastrointestinal tract. Present approaches for using adenovirus for transfer of nucleic acids are limited in that the specific receptor to the ligand employed (e.g., transferrin) must be present on the cell surface for transfection to be accomplished. Additionally, it was recently discovered that better transfection results are obtained when the DNA is not physically attached to any molecule upon introduction into the cell. This invention overcomes such limitations by incubating the DNA to be transfected with a cationic agent or polycationic liposome and contacting the target cell with the nucleic acids in the presence of adenovirus. Because the nucleic acid(s) is not bound to any molecule capable of effecting its entry into the cell, the transfection is more efficient. Furthermore, no specific ligand need be present for transfection to occur. Issuance of a patent on this invention is currently pending. [portfolio: Gene-Based Therapies—Therapeutics; Gene-Based Therapies—Research Tools and Reagents]

Diagnosing Alzheimer's Disease And Schizophrenia

Merril, C., Johnson, G., Ghanbari, H. (NIMH)

Filed 17 Jun 92

Serial No. 07/904,045

Alzheimer's disease represents the fourth leading cause of death in the United States, killing over 100,000 annually, and afflicting some 4 million Americans. Various reports indicate that the incidence of Alzheimer's disease increases with age and estimate that the prevalence of Alzheimer's disease in people over 80 years of age is between 20 and 50%. Schizophrenia occurs in approximately 1.5% of adults. Over 2.5 million people in the U.S. and nearly 47 million people worldwide suffer from schizophrenia. Under currently available technology Alzheimer's disease can only be presumptively diagnosed by pathological examination of brain tissue during autopsy in conjunction with a clinical history of dementia. In the diagnosis of schizophrenia, the clinician is limited to aberrations of behavior. Although there has previously been no generally accepted laboratory markers for either of these two diseases of the central nervous system it has been discovered that production of certain proteins is increased in acute phase reactions associated with these disorders. The present invention provides methods of diagnosing Alzheimer's disease and schizophrenia by detecting elevated levels of such proteins in a biological sample from a patient either by immunoassay or 2D-gel electrophoresis. [portfolio: Central Nervous System—Diagnostics]

Dated: July 6, 1995.

Barbara M. McGarey,

Deputy Director, Office of Technology Transfer.

[FR Doc. 95–17780 Filed 7–19–95; 8:45 am]

BILLING CODE 4140–01–P

National Heart, Lung, and Blood Institute; 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 Heart, Lung, and Blood Special Emphasis Panel (SEP) meeting:

Name of SEP: Race and Gender Differences in Sepsis Mediator Release (Telephone Conference Call).
Date: August 1, 1995.
Time: 1 p.m.
Place: Rockledge II, Room 7204, 6701 Rockledge Drive, Bethesda, Maryland.
Contact Person: Dr. Eric Brown, Rockledge II, Room 7204, 6701 Rockledge Drive, Bethesda, Maryland 20892, (301) 435–0299.

Purpose/Agenda

To review and evaluate contract proposals.

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

This notice is being published less than fifteen days prior to the meeting due to the urgent need to meet timing limitations imposed by the grant review cycle.

(Catalog of Federal Domestic Assistance Programs Nos. 93.837, Heart and Vascular Diseases Research; 93.838, Lung Diseases Research; and 93.839, Blood Diseases and Resources Research, National Institutes of Health)

Dated: July 14, 1995.

Susan K. Feldman,

Committee Management Officer, National Institutes of Health.

[FR Doc. 95–17776 Filed 7–19–95; 8:45 am]

BILLING CODE 4140–01–M

Division of Research Grants; Closed Meetings

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 Division of Research Grants Special Emphasis Panel (SEP) meetings:

Purpose/Agenda

To review individual grant applications.

Name of SEP: Multidisciplinary Sciences.
Date: August 3, 1995.
Time: 1 p.m.
Place: NIH, Rockledge II, Room 5210, Telephone Conference.
Contact Person: Dr. Nadarajen Vydelingum, Scientific Review Administrator, 6701 Rockledge Drive, Room 5210, Bethesda, MD 20892, (301) 435–1176.

Name of SEP: Behavioral and Neurosciences.
Date: August 7, 1995.
Time: 2 p.m.
Place: NIH, Rockledge II, Room 5172, Telephone Conference.
Contact Person: Dr. Leonard Jakubczak, Scientific Review Administrator, 6701 Rockledge Drive, Room 5172, Bethesda, MD 20892, (301) 435–1247.

Name of SEP: Behavioral and Neurosciences.
Date: August 8, 1995.
Time: 2 p.m.
Place: NIH, Rockledge II, Room 5172, Telephone Conference.
Contact Person: Dr. Leonard Jakubczak, Scientific Review Administrator, 6701 Rockledge Drive, Room 5172, Bethesda, MD 20892, (301) 435–1247.

Name of SEP: Multidisciplinary Sciences.
Date: August 9, 1995.
Time: 9 a.m.
Place: Holiday Inn, Chevy Chase, MD.
Contact Person: Dr. Houston Baker, Scientific Review Administrator, 6701 Rockledge Drive, Room 5208, Bethesda, MD 20892, (301) 435–1175.

Name of SEP: Biological and Physiological Sciences.
Date: August 10, 1995.
Time: 2 p.m.
Place: NIH, Rockledge II, Room 6154, Telephone Conference.
Contact Person: Dr. David Redmondini, Scientific Review Administrator, 6701 Rockledge Drive, Room 6154, Bethesda, MD 20892, (301) 435–1038.

Name of SEP: Multidisciplinary Sciences.
Date: August 11, 1995.
Time: 12 noon.
Place: NIH, Rockledge II, Room 5104, Telephone Conference.
Contact Person: Dr. Donald Schneider, Scientific Review Administrator, 6701 Rockledge Drive, Room 5104, Bethesda, MD 20892, (301) 435–1165.

Name of SEP: Biological and Physiological Sciences.
Date: August 11, 1995.
Time: 2 p.m.
Place: NIH, Rockledge II, Room 6154, Telephone Conference.
Contact Person: Dr. David Redmondini, Scientific Review Administrator, 6701 Rockledge Drive, Room 6154, Bethesda, MD 20892, (301) 435–1038.

Name of SEP: Clinical Sciences.
Date: August 16, 1995.
Time: 11 a.m.
Place: NIH, Rockledge II, Room 4136, Telephone Conference.
Contact Person: Dr. Gordon Johnson, Scientific Review Administrator, 6701 Rockledge Drive, Room 4136, Bethesda, MD 20892, (301) 435–1212.

Name of SEP: Clinical Sciences.
Date: August 21, 1995.
Time: 2 p.m.
Place: NIH, Rockledge II, Room 4136, Telephone Conference.
Contact Person: Dr. Gordon Johnson, Scientific Review Administrator, 6701 Rockledge Drive, Room 4136, Bethesda, MD 20892, (301) 435–1212.

The meetings will be closed in accordance with the provisions set forth in secs. 552b(c)(4) and 552(c)(6), Title 5, U.S.C. Applications and/or proposals and the discussions could reveal confidential trade secrets of commercial property such as patentable material and personal information concerning individuals associated with the