on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

FOR FURTHER INFORMATION CONTACT: To request more information on the proposed project or to obtain a copy of the data collection plans and instruments, contact Dr. A. Richley Sharrett, Project Officer, NIH, NHLBI 6701 Rockledge Drive, MSC 7934, Bethesda, MD 20892–7934, or call non-toll-free number (301) 435–0448 or E-mail your request, including your address to: SharretR@nhlbi.nih.gov.

Comments due Date: Comments regarding this information collection are best assured of having their full effect if received on or before October 23, 2000.

Dated: August 8, 2000.

Peter Savage,

Acting Director, Division of Epidemiology and Clinical Applications, National Heart, Lung, and Blood Institute.

[FR Doc. 00–21366 Filed 8–21–00; 8:45 am]

BILLING CODE 4140–01–M

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.

Identification of a Novel Renal NADPH Oxidase

Thomas L. Leto, Miklos Geiszt (NIAID)
DHHS Reference No. E–116–00/0
Filed 12 Apr 2000
Licensing Contact: Marlene Shinn; 301/496–7056 ext. 285; e-mail: shinnm@od.nih.gov

The NIH announces the identification of a renal NAD(P)H oxidase termed RenOX, produced by the proximal convoluted tubule cells of the kidney, which is proposed to be an oxygen sensor in the kidney involved in regulation of production of erythropoietin. As a source of superoxide and other reactive oxygen species in the kidney, RenOX is thought to have a direct role in the oxidative down-regulation of erythropoietin and other hypoxia-responsive genes in response to oxygen levels detected in the kidney.

Because the inhibition of RenOX may lead to an increase in the production of erythropoietin, it has been suggested that it can be used as a screening tool for the development of therapies against diseases which currently use recombinant erythropoietin as a treatment. These include anemia associated with chronic renal failure, HIV infection and antiretroviral therapy, cancer, cancer chemotherapy, and chronic inflammatory conditions (rheumatoid arthritis, inflammatory bowel disease). Because recombinant erythropoietin is considered a costly therapy, it may be that an inhibitor of RenOX may prove to be a less expensive alternative.

It is also possible that drugs determined to affect RenOX activity may be used to treat hypertension in patients, since RenOX may also affect proton transport and sodium reabsorption by kidney tubule cells. Because expression of recombinant RenOX was shown to induce cellular senescence, other uses of RenOX, by way of gene therapy, may include limiting the growth of tumors either by inducing tumor cell senescence or inhibiting angiogenesis.

Because RenOX is proposed to be a key component of oxygen sensing in the kidney, the NIH believes it to be a valuable means by which new drugs and therapies can be developed and benefit the public health.

This research has been published in Geiszt *et al.*, ''Identification of RenOX, an NAD(P)H Oxidase in Kidney,'' Proc. Nat. Acad.Sci., U.S.A., vol 97, pp 8010–8014 (July 5, 2000).

Amyloid β Is a Ligand for FPR Class Receptors

Ji Ming Wang et al. (NCI)
Serial No. 60/186,144
Filed 01 Mar 2000
Licensing Contact: Marlene Shinn; 301/496–7056 ext. 285; e-mail: shinnm@od.nih.gov

Alzheimer's disease is the most important dementing illness in the United States because of its high prevalence. 5 to 10% of the United States population 65 years and older are afflicted with the disease. In 1990 there were approximately 4 million individuals with Alzheimer's, and this number is expected to reach 14 million by the year 2050. It is the fourth leading cause of death for adults, resulting in more than 100,000 deaths annually.

Amyloid beta (Aβ) has been identified as playing an important role in the neurodegeneration of Alzheimer's disease. However the mechanism used is unknown and has been postulated to be either direct or indirect through an induction of inflammatory responses.

The NIH announces a new early stage technology, that identifies the 7-transmembrane, G-protein-coupled receptor, FPRL–1, as a functional receptor for Aβ peptides. The Aβ peptides use the FPRL–1 receptor to attract and activate human monocytes, and have been identified as a principal component of the amyloid plaques associated with Alzheimer's disease. In addition, astrocytes stimulated with ligands of FPRL1 produce a proinflammatory cytokine interleukin 6. Because amyloid β peptides interact with the FPRL1 receptor, a direct link is created between Aβ and the inflammation observed during the course of Alzheimer's disease.

This technology provides a target in which to direct the development of preventative or therapeutic agents for Alzheimer's disease. Newly discovered Aβ–FPR class receptor complexes can be used to modulate the Aβ-induced inflammation response by administering polynucleotides, chemical compounds, or polypeptides that interact with either Aβ or the FPR class receptor(s), or inhibit complex formation altogether. Although this technology is in the early stages of drug development, the potential to find new drugs to Alzheimer's and other neurodegenerative diseases is a real possibility, through its use, to those working in this field.

Constitutively Open Voltage-Gated K+ Channels and Methods for Discovering Modulators Thereof

Drs. Kenton J. Swartz, David H. Hackos (NINDS)
DHHS Reference Number E–286–99/0
Filed 10 Feb 2000
Licensing Contact: John Rambosek, Ph.D.; 301/496–7056 ext. 270; e-mail: rambosej@od.nih.gov

This technology relates to materials and methods for developing high throughput strategies for discovery of both inhibitors and activators of voltage-gated potassium channels. Voltage gated potassium channels are important regulators of electrical excitability throughout the nervous system, vascular and cardiac smooth muscle, and various secretory tissues such as the pancreas. Drugs that modulate the activity of these receptors could have applications in a variety of therapeutic areas involving abnormal electrical activity, including epilepsy, stroke, cardiac arrhythmia, hypertension, and diabetes.

The technology described here involves the identification of mutations in voltage-gated potassium channels that effectively lock the pore open at all membrane potentials. Previously, it has not been possible to develop yeast-based high throughput screens using voltage-gated potassium channels because these channels are normally closed at the negative membrane potentials associated with yeast.

In addition, other types of high-throughput screens for K channel inhibitors and activators use voltage-sensitive dyes or indicators as reporters of K channel activity. Mutations that lock voltage-gated K channels open at negative voltages could significantly improved the sensitivity of these voltage-sensitive screens. The strategy employed to lock open voltage-gated potassium channels involves alterations in an area of the protein that is conserved in all voltage-gated potassium channels, and should therefore be applicable to all such potassium channels. This will allow generally for the development of high-throughput screens for activators and inhibitors of all voltage-gated potassium channels.

A Provisional Patent Application Serial Number 60/081,692 has been filed for this technology. It is available for licensing through a DHHS Patent license.

Equilibrium Thermodynamics-Based Ligand Binding Assays for Macromolecules

Dong Xie, John W. Erickson (NCI)
DHHS Reference No. E–076–00/0
Filed 01 Feb 2000
Licensing Contact: J.P. Kim; 301/496–7056 ext. 264; e-mail: kimj@od.nih.gov

High affinity binding is observed in many biological processes and is assayed in the design and development of compounds as therapeutic agents for specific biological targets. The accurate determination of binding affinities for HIV protease inhibitors is important for the determination of the biochemical fitness of drug-resistant HIV variants that contain mutations in the protease gene.

There remains a need for a highly sensitive, accurate, and widely applicable method for determining the binding affinity of a ligand for a folded macromolecule. Accordingly, the present invention provides methods for determining the binding affinity of a ligand for a macromolecule and methods for determining whether or not a compound is a reversible ligand for a macromolecule, *e.g.*, in the development of HIV therapeutics.

Delivery of Proteins Across Polar Epithelial Cell Layers

David Fitzgerald et al. (NCI)
DHHS Reference No. E–277–98/0
Filed 22 Oct 1999
Licensing Contact: Carol Salata; 301/496–7735 ext. 232; e-mail: salatac@od.nih.gov

Many pharmaceutical proteins which need to gain systemic access cannot be administered enterally because the enzymes of the digestive system degrade the proteins before they gain access. Therefore, pharmaceutical proteins generally are administered by injection. Diseases that require repeated administration of a protein over long period of time, such as diabetes, can require daily injection. Of course, frequent injections are not pleasant for the patient and means to deliver proteins without injection would be advantageous.

This invention provides methods for parenteral administration of a protein by transmucosal delivery and without injection. Molecules that bind α2 macroglobulin receptor, when applied to the apical surface of a polarized epithelial cell layer, are able to traverse through the basal side of the cell and released into the sub-epithelial space. This invention takes advantage of that fact by using Pseudomonas exotoxin and derivatives as carriers to deliver proteins and molecules bound to them across the epithelial surface without resorting to injection of the protein.

Nucleic Acid Molecules Encoding Hepatitis C Virus, Chimeric Hepatitis C Virus or Hepatitis C Virus Envelope Two Protein Which Lacks All or Part of Hypervariable Region One of the Envelope Two Protein and Uses Thereof

Xavier Forns, Jens Bukh, Suzanne U. Emerson, Robert H. Purcell (NIAID)
DHHS Reference No. E–287–99/0
Filed 23 Sep 1999
Licensing Contact: Carol Salata; 301/496–7735 ext. 232; e-mail: salatac@od.nih.gov

HCV is an enveloped, single stranded RNA virus, approximately 50 nm in diameter, that has been classified as a separate genus in the Flaviviridae family. The ability of HCV to undergo rapid mutation in a hypervariable region(s) of the genome coding for envelope protein may allow it to escape immune surveillance by the host; thus, most persons infected with HCV develop chronic infection. These chronically infected individuals have a relatively high risk of developing chronic hepatitis, liver cirrhosis and hepatocellular carcinoma.

This invention relates to nucleic acid molecules which encode a hepatitis C virus envelope two protein which lacks all or part of the hypervariable region one (HVR1) of the envelope two (E2) protein. RNA transcripts from a full-length HCV cDNA clone from which the HVR1 was removed were able to replicate when transfected into the liver of a chimpanzee. The fact that the HVR1 is not essential for virus replication is relevant because the partial or complete deletion of this region might change the immune response to a more effective one. Attenuated viruses could be generated and used as vaccine candidates. In addition, DNA constructs or proteins lacking this region could be used as vaccine candidates.

Agonist and Antagonist Peptides of CEA

Jeffrey Schlom, Elena Barzaga, Sam Zaremba (NCI)
Serial No. 60/061,589 filed 10 Oct 1997; PCT/US98/19794 filed 22 Sep 1998; DHHS Reference No. E–099–96/3 filed 06 Apr 2000
Licensing Contact: Elaine White; 301/496–7056 ext. 282; e-mail: gesee@od.nih.gov

The current invention embodies the identification of an enhancer agonist peptide variant of a nine amino acid sequence (designated CAP–1) contained in the human carcinoembryonic antigen (CEA) gene. CEA is an antigen which is overexpressed on a variety of human tumor types including the following carcinomas: colorectal, breast, non-small cell lung, pancreatic and head and neck. Studies have shown that the CAP–1 peptide is an immunodominant epitope of CEA. Moreover, recent studies have shown that the modification of a single amino acid in the CAP–1 sequence results in the generation of a enhancer agonist peptide, designated CAP1–6D. The CAP1–6D peptide is capable of stimulating human T-cells to far greater levels than that of CAP1. These T-cells, moreover, have been shown to lyse human tumor cells expressing native CEA. Thus the CAP1–6D enhancer

agonist peptide represents a potential immunogen for use as therapeutic vaccine against a wide range of human cancers which express CEA and may also have potential use as a vaccine to prevent preneoplastic lesions or cancers expressing CEA.

Dated: August 14, 2000.

Jack Spiegel,

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

[FR Doc. 00–21367 Filed 8–21–00; 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.

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Cloned Genome of Infectious Hepatitis C Virus of Genotype 2a and Uses Thereof

Jens Bukh, Masayuki Yanagi, Robert H. Purcell, Suzanne U. Emerson (NIAID)
DHHS Reference No. E–100–99/0
Filed 04 Jun 1999

The current invention provides a nucleic acid sequence comprising the genome of infectious hepatitis C viruses (HCV) of genotype 2a. The encoded polyprotein differs from those of the infectious clones of genotypes 1a and 1b (PHS Invention Number E–050–98/0) by approximately thirty (30) percent. It covers the use of this sequence and polypeptides encoded by all or part of the sequence, in the development of vaccines and diagnostic assays for HCV and the development of screening assays for the identification of antiviral agents for HCV. Additional information can be found in Yanagi *et al.* (1999), Virology 262, 250–263.

HCV/BVDV Chimeric Genomes and Uses Thereof

Jae-Hwan Nam, Jens Bukh, Robert H. Purcell, Suzanne U. Emerson (NIAID)

DHHS Reference No. E–102–99/0

Filed 04 June 1999

The current invention provides nucleic acid sequences comprising chimeric viral genome of hepatitis C Virus (HCV) and bovine viral diarrhea viruses (BVDV). The chimeric viruses are produced by replacing the structural region or a structural gene of an infectious BVDV clone with the corresponding region or gene of an infectious HCV. It covers the use of these sequences and polypeptides encoded by all or part of the sequences in the development of vaccines and diagnostic assays for HCV and the development of screening assays for the identification of antiviral agents for HCV.

Infectious cDNA Clone of GB Virus B and Uses Thereof

Jens Bukh, Masayuki Yanagi, Robert H. Purcell, Suzanne U. Emerson (NIAID)

DHHS Reference No. E–173–99/0

Filed 04 Jun 1999

The current invention provides nucleic acid sequences comprising the genomes of infectious GB virus B, the most closely related member of the Flaviviridae to hepatitis C virus (HCV). It also covers chimeric GBVB–HCV sequences and polypeptides for use in the development of vaccines and diagnostic assays for HCV and the development of screening assays for the identification of antiviral agents for HCV. Additional information can be found in Bukh *et al.* (1999), Virology 262, 470–478.

Dated: August 14, 2000.

Jack Spiegel,

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

[FR Doc. 00–21368 Filed 8–21–00; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Cancer Institute; 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 meeting of the National Cancer Advisory Board.

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.

A portion of the meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(6) and 552b(c)(9), title 5 U.S.C., as amended. The discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the review of applications, and information concerning NCI and/or its contractors, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, and the premature disclosure of discussions related to personnel and programmatic issues would be likely to significantly frustrate the subsequent implementation of recommendations.

Name of Committee: National Cancer Advisory Board.

Dates: September 11–13, 2000.

Name of Committee: National Cancer Advisory Board, Subcommittee on Communications, Subcommittee on Clinical Investigations and Subcommittee on Confidentiality.

Open: September 11, 7 pm to 9 pm.

Agenda: To discuss activities related to the implementation of policies relevant to the functional responsibilities of each specific subcommittee.

Place: Bethesda Hyatt Regency, One Bethesda Metro Center, Bethesda, MD 20814, (301) 657–1234.

Name of Committee: National Cancer Advisory Board.

Dates: September 11–13, 2000.

Open: September 12, 9 am to 12 pm.

Agenda: Program reports and presentations; Business of the Board. For detailed agenda: See NCI Homepage/Advisory Board and Groups *http://deainfo.nci.nih.gov/ADVISORY/boards.htm* Tentative agenda available 10 working days prior to meetings; Final agenda available 5 working days prior to meetings.

Name of Committee: National Cancer Advisory Board, Subcommittee on Planning and Budget.