conducted among 9,211 male smokers from 1971 to 1983. No reduction in lung cancer mortality was observed in the MLP with an intense regimen of x-ray and sputum cyotology screening. Recent analysis of updated mortality and case survival data (through 1996) suggests that lesions with little-to-no clinical relevance (over-diagnosis) may have been detected through screening in the MLP intervention arm. Over-diagnosis leads to unnecessary medical interventions, including diagnostic and treatment procedures that carry with them varying degrees of risk. Consequently, over-diagnosis can result in considerable harm, including premature death, that would not have occurred in the absence of screening. The persistence, after screening ends, of an excess of lung cancer cases in the intervention arm is the strongest evidence in support of over-diagnosis, but this information cannot be adequately obtained with available MLP data. Therefore, we propose to recontact the MLP participants and/or their next-of-kin to determine the participants who were diagnosed with lung cancer after the formal end of the Project. These data will allow the NCI to either more-convincingly state or perhaps refute the possibility of overdiagnosis in lung cancer screening, and may be used to guide future research agendas and lung cancer screening policies. Frequency of response: Once. Affected public: Individuals. Type of respondents: MLP participants or their next-of-kin. The annual reporting burden is as follows: Maximum number of respondents: 6,223; Estimated number of Responses per Respondent: 1. Average Burden Hours Per Response: 0.25; Estimated Maximum Total Annual Burden Hours Requested: 1,556. The annualized cost to respondents is estimated at zero. There are no Capital Costs to report. There are no Operating or Maintenance Costs to report.

Request for Comments

Written comments and/or suggestions from the public and affected agencies should address one or more of the following points: (1) Evaluate whether the proposed collection of information is necessary for the proper performance of the function of agency, including whether the information will have practical utility; (2) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) Enhance the quality, utility, and clarity of the information to be collected; and (4) Minimize the burden of the colletion of information 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.

Direct Comments to OMB

Written comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time, should be directed to the Office of Management and Budget, Office of Regulatory Affairs, New Executive Office Building, Room 10235, Washington, DC 20530, Attention: Desk Officer for NIH. To request more information on the proposed project or to obtain a copy of the data collection plans and instruments, contact Dr. Pamela Marcus, Epidemiologist, Biometry, Research Group, Division of Cancer Prevention, National Cancer Institute, Suite 3131 EPN, 6130 Executive Blvd, Bethesda, MD 20892-7354; or call non-toll free 301-496-7468; or e-mail pm145q@nih.gov.

Comments Due Date: Comments regarding this information collection are best assured of having their full effect if received within 30 days of the date of this publication.

Dated: October 7, 2002.

Reesa L. Nichols,

 $\begin{tabular}{ll} NCI Project Clearance Liaison. \\ [FR Doc. 02-26213 Filed 10-15-02; 8:45 am] \\ \hline \textbf{BILLING CODE 4140-01-M} \end{tabular}$

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 and issued patents listed below may be obtained by contacting Peter A. Soukas, J.D., at the Office of Technology Transfer, National Institutes of Health,

6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852–3804; telephone: 301/496–7056 ext. 268; fax: 301/402–0220; e-mail: soukasp@od.nih.gov. A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

Novel Spore Wall Proteins and Genes From Microsporidia

J. Russell Hayman, John T. Conrad, Theodore Nash (NIAID)DHHS Reference No. E–125–01/0Filed 04 Dec 2001

Microsporidia are obligate intracellular organisms that infect a wide variety of animals ranging from insects and fish to mammals, including humans. Of over 1,000 microsporidial species identified, at least 13 are known to infect humans. The species most commonly identified in humans are members of the families Encephalitozoonidae and Enterocytozoonidae. In humans, microsporidiosis is most often found in HIV/AIDS patients and commonly results in severe diarrhea and wasting. However, microsporidiosis also occurs in immunocompetent individuals and common farm animals. The disease is transmitted via environmentally resistant spores.

This invention claims two spore wall constituents (SWP1 and SWP2) from the microsporidian Encephalitozoon intestinalis and the genes from which these two proteins are derived. Further claimed are methods of diagnosing and treating microsporidiosis in a subject. Also claimed are methods for producing an immunoprotective response in a subject. SWP1 is expressed on the surfaces of developing sporonts and SWP2 is expressed on the surfaces of fully formed sporonts. Therefore, they should be exposed to the host cell environment. Based on this theory, antibody responses to SWP1 and SWP2 were addressed in an in vivo mouse model. Immunoprecipitation and Western blot analyses indicated that SWP1 and SWP2 are immunogenic in mouse infections.

This invention is further described in Hayman *et al.*, "Developmental expression of two spore wall proteins during maturation of the microsporidian *Encephalitozoon intestinalis*," *Infect. Immun.* 2001 Nov;69(11):7057–66.

Method for Determining Sensitivity to a Bacteriophage

Carl R. Merril (NIMH), Sankar Adhya (NCI), Dean M. Scholl (NIMH) DHHS Reference No. E–318–00/0 Filed 23 Jan 2002

Traditionally, chemical antibiotics have been used to treat a variety of bacterial infections. However, bacterial resistance to current antibiotics is an increasingly serious problem in human and veterinary health as well as agriculture. Many experts believe that strains of disease-causing bacteria resistant to all common antibiotics will arise in the next ten to twenty years. Bacteriophages offer a promising therapeutic alternative to antibiotics for these antibiotic resistant bacteria. There are also situations in which bacteriophage may be more suitable than antibiotics to treat infections caused by against antibiotic-sensitive bacteria. Bacteriophages are highly hostspecific, thus determining whether a phage would be therapeutically useful against a particular bacterium or strain of bacteria is very important but can be a time-consuming and labor-intensive process.

The current invention claims a method for selecting a therapeutic bacteriophage that would be effective against a particular disease-causing bacteria, comprising a number of bacteriophages containing reporter nucleic acids capable of being expressed when the bacteriophage infects a bacterial cell. These bacteriophages are separately contacted with a sample contaminated by a bacterium. Expression of the reporter is then detected, indicating which bacteriophage has infected a bacterial cell and is thus a potential therapeutic phage against the particular bacteria. Also claimed in the application are kits allowing for the rapid identification of potentially therapeutic bacteriophages.

Four Chimpanzee Monoclonal Antibodies That Neutralize Hepatitis A Virus

Darren Schofield, Suzanne Emerson, Robert Purcell (NIAID) DHHS Reference No. E–356–01/0 Filed 07 Nov 2001

This invention claims antibodies and/ or fragments thereof specific for hepatitis A virus (HAV) and the use of the antibodies in the diagnosis, prevention, and treatment of hepatitis A. Hepatitis A is the most common type of hepatitis reported in the United States, which reports an estimated 134,000 cases annually, and infects at least 1.4 million people worldwide each year. HAV is a positive sense RNA virus that is transmitted via the fecal-oral route, mainly through contaminated water supplies and food sources. HAV is thought to replicate in the oropharynx and epithelial lining of the intestines, where it initiates a transient viremia and subsequently infects the liver. Humoral

immunity has been shown to provide an effective defense against Hepatitis A. Prior to the availability of the current inactivated virus vaccines, pooled human immune globulin preparations were routinely used to protect individuals traveling to areas of the world where HAV is endemic. Chimpanzees are susceptible to infection with HAV and can produce antibodies that neutralize the virus. Chimpanzee immunoglobulins are virtually identical to those of humans; thus, they have the same potential as human antibodies for clinical applications. The inventors have shown that the four chimpanzee monoclonal antibodies described in the patent application neutralized HAV strains HM-175, AGM-27, and the HM-175 VP3-070 mutant. Since only a single serotype of HAV has been identified, these antibodies are predicted to neutralize most, if not all, isolates of HAV.

Efficient Inhibition of HIV-1 Viral Entry Through a Novel Fusion Protein Including CD4

James Arthos, Claudia Cicala, Anthony Fauci (NIAID)

DHHS Reference No. E-337-01/0 Filed 25 Oct 2001

This invention relates to CD4 fusion proteins for use in the treatment of an immunodeficiency virus infection such as human immunodeficiency virus (HIV). These polypeptides have been shown by the inventors to inhibit the entry of primary isolates of HIV-1 into CD4+ T cells by targeting the gp120 subunit of the HIV-1 envelope. The invention claims recombinant polypeptides comprising a CD4 polypeptide ligated at its C-terminus with a portion of a human immunoglobulin comprising a hinge region and two constant domains of an immunoglobulin heavy chain. The portion of the IgG is fused at its Cterminus with a polypeptide comprising a tailpiece from the C terminus of the heavy chain of an IgA antibody. This protein is very large (greater than 800 kilodaltons), which may contribute to its ability to inhibit entry of primary isolates of HIV-1 into T cells. It presents twelve gp120 binding domains (D1D2) and can bind at least ten gp120s simultaneously. The inventors have shown that the construct efficiently neutralizes primary isolates from different HIV subgroups. Also claimed are use of the construct as a component of a vaccine and as a diagnostic.

Novel Antimalarial Compounds, Methods of Synthesis Thereof, Pharmaceutical Compositions Comprising Same, and Methods of Using Same for Treatment and Prevention of Malaria

Michael R. Boyd (NCI), Gerhard Bringmann (EM), Sven Harmsen (EM) Roland Gotz (EM), T. Ross Kelly (EM), Matthias Wenzel (EM), Guido Francois (EM), J. D. Phillipson (EM), Laurent A. Assi (EM), Christopher Schneider (EM)

DHHS Reference No. E–090–94/0, Issued as U.S. Patent 5,639,761 on 17 Jun 1997

DHHS Reference No. E-090-94/1, Filed 16 Apr 1997

DHHS Reference No. E–200–94/0, Issued as U.S. Patent 5,552,550 on 03 Sep 1996

DHHS Reference No. E–200–94/1, Issued as U.S. Patent 5,763,613 on 09 Jun 1998

DHHS Reference No. E–200–94/2, Issued as U.S. Patent 6,140,339 on 31 Oct 2000

DHHS Reference No. E–200–94/4, Filed 16 Mar 2000

DHHS Reference No. E–201–94/0, Issued as U.S. Patent 5,571,919 on 05 Nov 1996

DHHS Reference No. E–201–94/2, Issued as U.S. Patent 5,578,729 on 26 Nov 1996

DHHS Reference No. E–201–94/3, Issued as U.S. Patent 5,789,594 on 04 Aug 1998

DHHS Reference No. E–201–94/4, Issued as U.S. Patent 5,786,482 on 28 Jul 1998

According to data recently reported by the World Health Organization (WHO), the death rate from malaria exceeds one million individuals per year. The Public Health Service seeks exclusive or non-exclusive licensee(s) to develop and commercialize the technology claimed within the portfolio of U.S. patents issued and pending, and corresponding international patents issued and pending. These patents and pending applications claim an exceptionally broad universe of novel naphthylisoquinoline alkaloid compounds, and methods of total synthesis thereof. Representative examples of these compounds have been shown to have potent in vitro activity against malaria parasites, including parasites that are highly resistant to available antimalarial drugs. Representative examples have also been shown to have potent in vivo activity against malaria parasites in animal models. Pharmaceutical compositions comprising these compounds, as well as methods of using the compounds to

treat or prevent a malarial infection of a host, are claimed. The relative structural simplicity of this class of compounds, and the ready synthetic access thereto, provide unprecedented opportunities for structure-activity relationship (SAR), lead-optimization and antimalarial drug development. The technology is further described in the following publications: *J. Nat Prod.* 1997 Jul.;60(7):677–83 and *Bioorg. Med. Chem. Lett.* 1998 Jul.;8(13): 1729–34.

A Novel Chimeric Protein for Prevention and Treatment of HIV Infection

Edward A. Berger (NIAID), Christie M. Del Castillo

DHHS Reference No. E-039-99/0 Filed 16 Mar 1999; PCT/US00/06946 Filed 16 Mar 2000

DHHS Reference No. E–039–99/2 Filed 13 Sep 2001

This invention relates to bispecific fusion proteins effective in viral neutralization. Specifically, the invention is a genetically engineered chimeric protein containing a soluble extracellular region of human CD4 attached via a flexible polypeptide linker to a single chain human monoclonal antibody directed against a CD4-induced, highly conserved HIV gp120 determinant involved in coreceptor interaction. Binding of the sCD4 moiety to gp120 induces a conformational change that enables the antibody moiety to bind, thereby blocking Env function and virus entry. This novel bispecific protein displays neutralizing activity against genetically diverse primary HIV-1 isolates, with potency at least 10-fold greater than the best described HIV–1 neutralizing monoclonal antibodies. The agent has considerable potential for prevention of HIV-1 infection, both as a topical microbicide and as a systemic agent to protect during and after acute exposure (e.g. vertical transmission, postexposure prophylaxis). It also has potential utility for treatment of chronic infection. Such proteins, nucleic acid molecules encoding them, and their production and use in preventing or treating viral infections are claimed.

Bacteriophage Having Multiple Host Range

Carl Merril (NIMH), Sankar Adhya (NCI), Dean Scholl (NIMH) DHHS Reference No. E–257–00/0 Filed 25 Jul 2000; PCT/US01/22390 Filed 25 Jul 2001

Recently, there has been a renewed interest in the use of phages to treat bacterial infections. The inventors have discovered FK1–5, a highly lytic, non-

lysogenic, stable bacteriophage with the ability to kill bacteria rapidly, making it a good candidate for phage therapy. The designation FK1-5 denotes the phage's ability to infect E. coli strains that contain the K1 polysaccharide in their outer capsule as well as *E. coli* strains that contain the K5 polysaccharide in their outer capsule. Sequence analysis of the tail proteins of phage FK1-5 by the inventors has shown that they are arranged in a cassette structure, suggesting that the host range of phages can be broadened to other K antigens, and even possibly other species of bacteria by recombinant techniques. FK1-5 has a particular advantage because it recognizes and attaches to the structures that confer virulence to bacteria. The inventors' demonstration that a phage can contain multiple tail proteins that expand its host range is useful for generating phage with broadspectrum antibacterial properties for the treatment of infectious diseases. The inventors have completed in vitro studies on this phage. Furthermore, because of the possibility of engineering the expression of recombinant tail proteins, gene transfer to organisms that are not normally infected by phages is also contemplated by the invention.

Vaccine for Protection Against Shigella sonnei Disease

Dennis J. Kopecko, De-Qi Xu, John O. Cisar (FDA) DHHS Reference No. E–210–01/0 Filed 16 Jan 2002

Shigellosis is a global human health problem. Transmission usually occurs by contaminated food and water or through person-to-person contact. The bacterium is highly infectious by the oral route, and ingestion of as few as 10 organisms can cause an infection in volunteers. An estimated 200 million people worldwide suffer from shigellosis, with more than 650,000 associated deaths annually. A recent CDC estimate indicates the occurrence of over 440,000 annual shigellosis cases in the United States alone, approximately eighty percent (80%) of which are caused by Shigella sonnei. Shigella sonnei is more active in developed countries. Shigella infections are typically treated with a course of antibiotics. However, due to the emergence of multidrug resistant Shigella strains, a safe and effective vaccine is highly desirable. No vaccines against Shigella infection currently exist. Immunity to Shigellae is mediated largely by immune responses directed against the serotype specific Opolysaccharide. Claimed in the invention are compositions and methods for inducing an

immunoprotective response against *S. sonnei*. Specifically, an attenuated bacteria capable of expressing an *S. sonnei* antigen comprised of the *S. sonnei* form I O-polysaccharide expressed from the *S. sonnei* rfb/rfc gene cluster is claimed. The inventors have shown that the claimed vaccine compositions showed 100 percent protection against parenteral challenge with virulent *S. sonnei* in mice.

Vaccine Against *Eschericha coli* 0157 Infection, Composed of Detoxified LPS Conjugated to Proteins

Shousun C. Szu, Edward Konadu, and John B. Robbins (NICHD) DHHS Reference No. E–158–98/0 Filed 20 July 1998 (PCT/US98/14976) DHHS Reference No. E–158–98/1 Filed 22 Jan 2001

This invention is a conjugate vaccine to prevent infection, in particular in young children under 5 years of age, by E. coli 0157:H7, an emerging human pathogen which causes a spectrum of illnesses with high morbidity and mortality, ranging from diarrhea to hemorrhagic colitis and hemolyticuremic syndrome (HUS). Infection is due to the consumption of water or meat contaminated by feces from infected animals, such as cattle. The conjugate is composed of the O-specific polysaccharide isolated from E. coli 0157, or other Shiga-toxin producing bacteria, conjugated to carrier proteins, such as non-toxic P. aeruginosa exotoxin A or Shiga toxin 1. A Phase I clinical trial, involving adult humans, showed the vaccine is safe and highly immunogenic. Adults, after one injection containing 25 µg of antigen, responded with high titers of bactericidal antibodies. Thus the conjugates of the invention are promising vaccines, especially for children and the elderly, who are most likely to suffer serious consequences from infection. The clinical study is described in J. Infectious Diseases 177, 383-387, 1998.

Murine Monoclonal Antibodies Effective To Treat Respiratory Syncytial Virus

Robert Chanock, Brian Murphy, Judy Beeler, and Kathleen van Wyke Coelingh (NIAID) DHHS Reference No. B-056-94/1

Available for licensing through a Biological Materials License Agreement are the murine MAbs described in Beeler, J.A. et al, "Neutralization Epitopes of the F Glycoprotein of Respiratory Syncytial Virus: Effect of Mutation Upon Fusion Function," J. Virology 63:2941–2950 (1989). The MAbs that are available for licensing are the following: 1129, 1153, 1142, 1200, 1214, 1237, 1121, 1112, 1269, and 1243. One of these MAbs, 1129, is the basis for a humanized murine MAb (see U.S. Patent Number 5.824.307 to humanized 1129 owned by MedImmune, Inc.), recently approved for marketing in the United States. MAbs in the panel reported by Beeler, et al. have been shown to be effective therapeutically when administered into the lungs of cotton rats by small-particle aerosol. Among these MAbs several exhibited a high affinity (approximately 10^{9-1}) for the RSV F glycoprotein and are directed at epitopes encompassing amino acid 262, 272, 275, 276 or 389. These epitopes are separate, nonoverlapping and distinct from the epitope recognized by the human Fab of U.S. Patent 5,762,905 owned by The Scripps Research Institute.

Cloned Genomes of Infectious Hepatitis C Virus and Uses Thereof

Masayuki Yanagi, Jens Bukh, Suzanne U. Emerson, Robert H. Purcell (NIAID) DHHS Reference No. E-050-98/0, Issued as U.S. Patent 6,153,421 on 28 Nov 2000

DHHS Reference No. E–050–98/2 Filed 14 Sep 2000; Canadian Application 2295552; Australian Application 84889/98; European Application 98935702.5

The current invention provides nucleic acid sequences comprising the genomes of infectious hepatitis C viruses (HCV) of genotype 1a and 1b. 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. Additional information can be found in Yanagi et al., (1997) Proc. Natl. Acad. Sci., USA 94, 8738–8743 and Yanagi et al., (1998) Virology 244, 151–172.

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; PCT/US00/15293 Filed 02 Jun 2000

DHHS Reference No. E-173-99/2 Filed 03 Dec 2001

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.

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
PCT/US00/15527 Filed 02 Jun 2000
DHHS Reference No. E–102–99/2
Filed 04 Dec 2001

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.

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 PCT/US00/15466

Filed 02 Jun 2000

DHHS Reference No. E-100-99/2

Filed 03 Dec 2001

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 (U.S. Patent 6,153,421) by approximately 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.

Dated: September 30, 2002.

Jack Spiegel,

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

[FR Doc. 02–26211 Filed 10–15–02; 8:45 am]

BILLING CODE 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN RESOURCES

National Institutes of Health

National Cancer Institute; 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 a meeting of the Board of Scientific Counselors, National Cancer Institute.

The meeting will be closed to the public as indicated below in accordance with the provisions set forth in section 552b(c)(6), Title 5 U.S.C., as amended for the review, discussion, and evaluation of individual intramural programs and projects conducted by the National Cancer Institute, including consideration of personnel qualifications and performance, and the competence of individual investigators, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Board of Scientific Counselors, National Cancer Institute, Subcommittee 1—Clinical Sciences and Epidemiology.

Date: November 18, 2002.

Time: 8 a.m. to 9 p.m.

Agenda: To review and evaluate personal qualifications and performance, and competence of individual investigators.

Place: National Cancer Institute, Building 31, C Wing, 6th Floor, Conference Rooms 6, 9000 Rockville Pike, Bethesda, MD 20892.

Contact Person: Abby B. Sandler, PhD, Scientific Review Administrator, Institute Review Office, Office of the Director, National Cancer Institute, National Institutes of Health, 6116 Executive Boulevard, Room 2114, Rockville, MD 20852, (301) 496–7628.

Any interested person may file written comments with the committee by forwarding the statement to the Contact Person listed on this notice. The statement should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person.

In the interest of security, NIH has instituted stringent procedures for entrance into the building by non-government employees. Persons without a government I.D. will need to show a photo I.D. and signin at the security desk upon entering the building.

(Catalog of Federal Domestic Assistant Program Nos. 93.392, Cancer Construction; 93.393, Cancer Cause and Prevention