

identification of genetic factors in an affected individual, aiding in the development of a tailored therapeutic plan; provide genetic epidemiologic data to elucidate the role of genetic factors in the progression of the disease.

**Market:** Individuals at risk for age-related macular degeneration. There are an estimated 15 million cases of age-related macular degeneration in the United States, and 50 million cases worldwide.

**Development Status:** This technology requires analytic validation before commercialization.

**Inventors:** Cigdem F. Dogulu, Owen M. Rennert, and Wai-Yee Chan (NICHD)

**Patent Status:** U.S. Provisional Application No. 60/733,042 filed 02 Nov 2005 (HHS Reference No. E-023-2006/0-US-01)

**Licensing Status:** Available for non-exclusive or exclusive licensing.

**Licensing Contact:** Fatima Sayyid, M.H.P.M.; 301/435-4521; sayyidf@mail.nih.gov

**Collaborative Research Opportunity:** The NICHD Laboratory of Clinical Genomics is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize Method Evolved for Recognition and Testing of Age-Related Macular Degeneration (MERT-ARMD). Please contact Kenneth J. Rose, Esq, PhD., at (301) 496-0477 or rosek@mail.nih.gov for more information.

### Method for Promoting Stem Cell Survival

**Description of Technology:** Regenerative medicine holds the potential to revolutionize the treatment of a host of diseases, such as neurodegenerative disorders, stroke, and many others. Stem cell technologies are a central focus of regenerative medicine research and treatment of cancer. An essential component of this research is the ability to control stem cell survival.

This technology describes a method to promote stem cell survival and proliferation by manipulating the phosphorylation state a key protein in these processes. This method has been shown to enhance survival and proliferation in stem cell cultures in vitro, and also in neuronal precursor cells in vivo.

**Application(s):** Clinical treatment for stroke and other neurodegenerative diseases by administration of agents that promote stem cell survival and proliferation; increased generation of stem cells in vitro; diagnostic assay for cancer to determine the phosphorylation state of the protein in

tumors; screening assays for agents that promote proliferation of stem cells or inhibit proliferation of cancer cells.

**Market:** Treatment for neurodegenerative disorders such as Parkinson's disease or stroke; prognostic marker to help determine response of individuals with cancer; commercial suppliers or large-scale users of stem cells.

**Development Status:** Early stage.

**Inventors:** Andreas Androutsellis-Theotokis and Ronald D.G. McKay (NINDS).

**Patent Status:** U.S. Provisional Application No. 60/715,935 filed 08 Sep 2005 (HHS Reference No. E-239-2005/0-US-01).

**Licensing Status:** Available for non-exclusive or exclusive licensing.

**Licensing Contact:** Fatima Sayyid, M.H.P.M.; (301) 435-4521; sayyidf@mail.nih.gov.

**Collaborative Research Opportunity:** The National Institute of Neurological Disorders and Stroke is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize agents that inhibit or induce phosphorylation of a protein that is a key regulator of proliferation and survival of stem cells and precursor cells. Please contact Martha Lubet at (301) 435-3120 or lubetm@mail.nih.gov.

Dated: April 24, 2006.

**Steven M. Ferguson,**

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

[FR Doc. E6-6547 Filed 5-1-06; 8:45 am]

**BILLING CODE 4167-01-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, HHS.

**ACTION:** Notice.

**SUMMARY:** The inventions listed below are owned by an agency 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.

#### Monoclonal Antibody for Lyme Disease Diagnostic and Research

Alan G. Barbour (NIAID)

HHS Reference No. E-075-2006/0—  
Research Materials

Licensing Contact: Susan Ano; 301/435-5515; anos@mail.nih.gov

The hybridoma producing a monoclonal antibody against the major flagellin protein (FlaB) is available for licensing. This antibody can be used in diagnostic and research applications related to Lyme disease or other Borrelia-caused conditions. More information about this antibody can be found in Barbour *et al.*, Infection and Immunity, May 1986, volume 52(5), pages 549-554.

#### Broad Spectrum Antiviral Compounds

Gary J. Nabel and Jae Ouk Kim (NIAID)

U.S. Provisional Application No. 60/775,666 filed 21 Feb 2006 (HHS Reference No. E-013-2006/0-US-01)

Licensing Contact: Susan Ano; 301/435-5515; anos@mail.nih.gov

This technology relates to broad spectrum antiviral compounds for treatment of infection caused by enveloped viruses. The compounds are fusions molecules of a phospholipase and a viral binding polypeptide. The subject technology requires the phospholipase component of the antiviral compound to have enzymatic activity, whereas previous studies demonstrating antiviral activity of some phospholipases did not require enzymatic activity. The compounds described by the current technology are not necessarily virus or viral strain specific, unlike many currently available antiviral compounds. The antiviral activity of the compounds has been demonstrated in vitro with representative viruses pseudotyped with envelope proteins from Ebola, HIV, Marburg, and VSV. Additionally, the antiviral activity was demonstrated with wild type HIV. The potential broad application of these compounds could address a significant health need for effective antivirals.

The Vaccine Research Center at the National Institute of Allergy and Infectious Diseases is seeking statements of capability or interest from parties

interested in collaborative research to further develop, evaluate, or commercialize treatments or vaccines against infections caused by enveloped viruses. Please contact Anna Z. Amar at 301/451-3525 and/or [aamar@niaid.nih.gov](mailto:aamar@niaid.nih.gov) for more information.

### Increased Cytokine Expression

Barbara Felber and George Pavlakis (NCI)

U.S. Provisional Application No. 60/758,819 filed 13 Jan 2006 (HHS Reference No. E-254-2005/0-US-01)

U.S. Provisional Application No. 60/758,680 filed 13 Jan 2006 (HHS Reference No. E-267-2005/0-US-01)

Licensing Contact: Susan Ano; 301/435-5515; [anos@mail.nih.gov](mailto:anos@mail.nih.gov)

The current technologies describe optimization of the genes encoding interleukins 12 (IL-12) and 15 (IL-15), resulting in higher levels of protein expression. Cytokines play an important role in both innate and adaptive immune responses. Their utility as immunotherapeutics against infectious disease and cancer as well as vaccine adjuvants has been previously demonstrated. However, cytokine expression from native sequences can be sub-optimal for several reasons, including potential splice sites within RNA and low stability coding sequences. The current technologies offer a means to increase expression of these important molecules. *In vitro* studies show a 5- to 10-fold mean increase in cytokine protein production. In some instances, further increased expression was achieved by use of a heterologous signal peptide. The subject technologies have application to DNA vaccination and treatment of diseases such as HIV, hepatitis B or C, cancer, and influenza. Some fields of use may not be available for licensing.

Dated: April 24, 2006.

**Steven M. Ferguson,**

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

[FR Doc. E6-6548 Filed 5-1-06; 8:45 am]

BILLING CODE 4167-01-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, HHS.

**ACTION:** Notice.

**SUMMARY:** The inventions listed below are owned by an agency 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.

#### Tetracyclines and Derivatives as Inhibitors of Human Tyrosyl-DNA-phosphodiesterase (Tdp1)

*Description of Technology:* The invention describes tetracycline compounds and their derivatives as having anticancer activity, as well as methods of treating cancer. Tetracyclines are commonly used as antibiotics, however testing of these compounds in a high throughput screening system for Tdp1 inhibitors revealed them to be potent Tdp1 inhibitors. Tdp1 is known to be important for mutation avoidance under normal growth conditions. Tetracycline derivatives are expected to increase the selectivity of chemotherapeutic agents (e.g. camptothecin), for tumors, thereby increasing the antitumor activity while reducing their side effects.

*Inventors:* Yves Pommier, Christophe Marchand, Laurent Thibaut (NCI).

*Patent Status:* U.S. Provisional Application filed March 27, 2006 (HHS Reference No. E-097-2006/0-US-01).

*Licensing Status:* Available for non-exclusive or exclusive licensing.

*Licensing Contact:* Richard Rodriguez; 301/435-4013; [rodrigr@mail.nih.gov](mailto:rodrigr@mail.nih.gov).

*Collaborative Research Opportunity:* The Laboratory of Molecular Pharmacology at the National Cancer Institute is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize tetracycline derivatives, particularly optimizing them for therapeutic use. Please contact Lisa Finkelstein at 301-451-7458 for more information.

#### Insect Cell Production of Recombinant Adeno-Associated Virus That Produce Cytotoxic Gene Products and Applications for Solid Tumor Therapy

*Description of Technology:* Cancer is the second leading cause of death in United States and it is estimated that there will be approximately 600,000 deaths caused by cancer in 2006. Due to the high incidence of death from cancer despite the use of current therapies, there is a strong need for targeted therapeutic approaches such as gene therapy.

This technology describes a new method for targeting solid tumors using gene therapy. More specifically, mammalian HEC-1 has a critical role in chromosome segregation and thus cell division. This technology involves targeted depletion of HEC-1 using shRNA against the HEC-1 mRNA inhibiting cancer cell growth in cell culture models (*in vitro*) as well as regressed tumor size in mouse model (*in vivo*). Additionally, this is the sole technology using an insect cell based recombinant adeno-associated virus (rAAV) gene transfer vehicle with high titer containing the shRNA of interest thus enabling high dosing during therapeutic intervention if necessary. This technology platform has the potential to treat a broad spectrum of cancers and related diseases.

*Applications:* A new anti-cancer adjuvant therapy for non-resectable tumors targeting HEC-1 protein; a new method involving insect cell based production of recombinant adeno-associated virus (rAAV) gene transfer vehicle.

*Market:* 600,000 deaths from cancer related diseases estimated in 2006. The technology platform involving new cancer therapy and gene therapy technology has a potential market of more than 50 billion dollars.

*Development Status:* The technology is currently in pre-clinical stage of development.

*Inventors:* Robert M. Kotin and Lina Li (NHLBI).

#### Publications:

1. EN Gurzov *et al.*, "RNA Interference against Hec 1 inhibits tumor growth in vivo," *Gene Ther.* 2006 Jan; 13 (1):1-7.
2. JG DeLuca *et al.*, "Hec1 and nuf2 are core components of the kinetochore outer plate essential for organizing microtubule attachment sites," *Mol Biol Cell.* 2005 Feb; 16 (2):519-531.
3. S Martin-Lluesma *et al.*, "Role of Hec1 in spindle checkpoint signaling and kinetochore recruitment of Mad1/Mad2," *Science* 2002 Sep 27; 297 (5590):2267-2270.