

concomitant cell growth and motility. The invention also encompasses other IGF-II antibodies or derivatives of the original antibodies and methods of using said antibodies to block binding of ligands. Additional embodiments describe methods for treating various human diseases associated with aberrant cell growth and motility including breast, prostate, and leukemia carcinomas. Thus, these novel IGF-II antibodies may provide a therapeutic intervention for multiple carcinomas without the negative side effects associated with IGF I and insulin inhibition.

This technology is available for licensing under an exclusive or non-exclusive patent license.

In addition to licensing, the technology is available for further development through collaborative research opportunities with the inventors.

#### **Compositions and Methods for Diagnosis and Treatment of Chemotherapy-Resistant Neoplastic Disease**

John Park (NINDS).

U.S. Provisional Application No. 60/571,296 filed 15 May 2004 (HHS Reference No. E-192-2004/0-US-01); PCT Application No. PCT/US2005/016924 filed 13 May 2005 (HHS Reference No. E-192-2004/0-PCT-02).

Licensing Contact: Jesse S. Kindra; 301/435-5559; [kindraj@mail.nih.gov](mailto:kindraj@mail.nih.gov).

The present invention relates to compositions and methods for the treatment of a neoplastic disease state (*i.e.* tumors) using RNA interference-mediated down regulation of stathmin expression. This invention also discloses methods for determining the presence or predisposition to a neoplastic disease state.

Stathmin is a cytoplasmic protein that is highly expressed in many different types of tumors such as leukemias, lung cancers and brain tumors. Stathmin is believed to be involved in the regulation of the cell cycle via its interactions with microtubules. Lowering the expression of stathmin in tumor cells using RNA interference (RNAi) technology causes a decrease in tumor cell growth and also causes such cells to become more sensitive to the effects of standard chemotherapeutic agents.

Accordingly, the delivery of stathmin RNAi oligonucleotides either alone or in combination with standard chemotherapies may be used to treat patients with various tumors. For example, retroviruses or adeno-associated viruses containing stathmin RNAi oligonucleotides could be

delivered to brain tumors in order to decrease cell growth and increase sensitivity to standard chemotherapies.

#### **Serine Protease Inhibitors**

Peter P. Roller, Peng Li (NCI).

PCT Patent Application No. PCT/US2004/34108 filed 15 Oct 2004 (HHS Reference No. E-272-2002/1-PCT-01).

Licensing Contact: Mojdeh Bahar; 301/435-2950; [baharm@mail.nih.gov](mailto:baharm@mail.nih.gov).

This disclosure concerns novel serine protease inhibitors and methods for using the inhibitors to reduce tumor progression and/or metastasis. Embodiments of the inhibitors are highly effective, selective inhibitors of matriptase, which has been implicated in tissue remodeling associated with the growth of cancerous tumors and cancer metastasis.

Angiogenesis and tumor invasion require that the normal tissue surrounding the tumor be broken down in a process referred to as tissue remodeling. Tissue remodeling is accomplished by a host of enzymes that break down the proteins in the normal tissue barriers comprising the extracellular matrix. Among the enzymes associated with degradation of the extracellular matrix and tissue remodeling are a number of proteases. The expression of some of these proteases has been correlated with tumor progression.

The disclosed compounds can be used to inhibit matriptase, MTSP1, or both, in vitro and in vivo and thus can be used in the prevention or treatment of conditions characterized by abnormal or pathological serine protease activity. For example, the compounds are useful for prevention or treatment of conditions characterized by the pathological degradation of the extracellular matrix, such as conditions characterized by neovascularization or angiogenesis, including cancerous conditions, particularly metastatic cancerous conditions where matriptase is implicated. The disclosed compounds can be used to decrease the degradation of the cellular matrix and thereby reduce concomitant tumor progression and metastasis. Conditions characterized by abnormal or pathological serine protease activity that can be treated according to the disclosed method include those characterized by abnormal cell growth and/or differentiation, such as cancers and other neoplastic conditions. Typical examples of cancers that may be treated according to the disclosed inhibitors and method include colon, pancreatic, prostate, head and neck, gastric, renal, and brain cancers.

Dated: October 25, 2005.

**Steven M. Ferguson,**

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

[FR Doc. 05-21831 Filed 11-1-05; 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, 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.

#### **Method To Disrupt Protein-Protein Interactions and Its Use To Identify Compounds Able To Inhibit HIV-1 Rev Protein Multimerization**

George Pavlakakis and Leonid Suvorov (NCI).

HHS Reference No. E-303-2005/0—Research Tool.

Licensing Contact: Sally Hu; 301/435-5606; [hus@mail.nih.gov](mailto:hus@mail.nih.gov).

The invention provides a FRET-based assay for the study of Rev-Rev interaction in vitro, based on YFP and CFP expression constructs for Rev. Using this assay, Rev-derived small peptides that can inhibit Rev-Rev interactions and disrupt dimerization were discovered. This assay can be used as an *in vitro* assay for studying protein-protein interactions in general, and for the discovery of inhibitors or agonists of such interactions as potential drugs against HIV infections, as well as for the

discovery of Rev dimerization inhibitors. Thus this assay can be useful for drug screening.

NIH will not seek patent protection for this invention, and it will be available for licensing through a Biological Materials License (BML) or through a Material Transfer Agreement (MTA).

In addition to licensing, the technology is available for further development through collaborative research opportunities with the inventors.

#### **Furin Inhibitors and Alpha-Defensin for Preventing Papilloma Virus Infection**

Patricia Day, Rebecca Richards, John Schiller, Douglas Lowy, Christopher Buck (NCI).

U.S. Provisional Application No. 60/692,846 filed 21 Jun 2005 (HHS Reference No. E-104-2005/1-US-01).

Licensing Contact: Michael Shmilovich; 301/435-5019; [shmilovm@mail.nih.gov](mailto:shmilovm@mail.nih.gov).

Available for licensing and commercial development are intellectual properties that claim compositions and methods for preventing papilloma virus (PV) infection in humans using furin inhibitors or alpha-defensins. PV viruses include a minor capsid protein L2 which requires a functional intracellular furin (a cell-encoded proprotein convertase present in endosomes) for escape from the endosomal spaces into the cytoplasm and viral infection. Accordingly, a disruption of viral infection by the inhibition of furin with molecules such as decanoyl-RVVR-CMK is potentially useful as a broad spectrum anti-HPV prophylactic.

Alpha-defensins, which are naturally secreted by the cervix, are reported to have potent and non-type specific anti-HPV properties. They can be administered as a topic microbicide to prevent infection by many HPV genotypes, including types not covered by the vaccines currently in Phase III clinical trials.

In addition to licensing, the technology is available for further development through collaborative research opportunities with the inventors.

#### **Identification of a Fusion/Entry Receptor for Human Herpesvirus-8**

Edward A. Berger, Johnan Kaleeba (NIAID).

U.S. Provisional Application No. 60/681,098 filed 13 May 2005 (HHS Reference No. E-051-2005/0-US-01).

Licensing Contact: Robert M. Joynes; 301/594-6565; [joynesr@mail.nih.gov](mailto:joynesr@mail.nih.gov).

This invention relates to stable, nonhuman cell lines and transgenic mammals having cells that coexpress human xCT as valuable tools for the continuing research of Kaposi's Sarcoma Herpes Virus (KSHV) infection and the development of more effective anti-KSHV therapeutics. Kaposi's sarcoma (KS) is the most common malignancy in AIDS patients and manifests as highly proliferative vascular lesions that appear on body extremities. KSHV is invariably present in all known clinical forms of KS and sero-conversion to KSHV antigens is considered a risk factor for development of the lesions. KSHV is believed to enter target cells by direct fusion of virion membrane with the target cell plasma membrane. The susceptibility of KSHV infection depends on the cell surface expression of the human xCT molecule. xCT plays a role in the membrane fusion step of KSHV infection. The identification of xCT as a receptor for KSHV may pave the way for deciphering the mechanism of KSHV pathogenesis.

This discovery has led to various potential commercial applications for this invention including the following:

- Cell lines expressing recombinant xCT for analysis of KSHV entry/infection
- Construction of xCT transgenic small animals for testing of KSHV inhibitors
- Use of peptides or fragments derived from extracellular regions of xCT as KSHV inhibitors
- Use of specific antibodies (including human versions) against xCT as KSHV inhibitors
- Use of small molecules targeted to xCT as KSHV inhibitors

In addition to licensing, the technology is available for further development through collaborative research opportunities with the inventors.

#### **Potent HIV-1 Entry Inhibitors and Immunogens**

Dimiter S. Dimitrov *et al.* (NCI).

U.S. Patent Application No. 10/506,651 filed 05 Mar 2002; Publication Number US-2005-0106160 (HHS Reference No. E-039-2002/0-US-02). Licensing Contact: Susan Ano; 301/435-5515; [anos@mail.nih.gov](mailto:anos@mail.nih.gov).

This technology relates to tethered antigenic constructs where flexible linkers join gp120 and the ectodomain of gp41. The HIV-1 envelope Glycoprotein (Env) undergoes conformational changes while driving entry. The inventors developed these

constructs to mimic some of the intermediate Env conformations. Tethered Envs with long (15 to 26 amino acid) linkers were stable and potently inhibited fusion mediated by R5, X4 and R5X4 Envs, most likely by exposure of gp41 structures that bind DP178 and cluster II mAbs. The fusion proteins with long linkers exhibited enhanced exposure of DP178 and cluster II mAbs binding gp41 structures that are critical for entry. These findings suggest the existence of conserved structures that are critical for HIV-1 entry, and could be used as novel immunogens for elicitation of broadly neutralizing antibodies and as antigens for selection of potent neutralizing antibodies by phage display.

In addition to licensing, the technology is available for further development through collaborative research opportunities with the inventors.

#### **A Novel Post-Transcriptional Regulatory Element (PRE) and Its Use in Expression Cassettes and Recombinant Viruses**

George N. Pavlakis *et al.* (NCI).

U.S. Patent Number 6,919,442, issued July 19, 2005; EP Patent Application Serial Number 99924362.9 (HHS Reference Number E-143-1998/0). Licensing Contact: Susan Ano; 301/435-5515; [anos@mail.nih.gov](mailto:anos@mail.nih.gov).

This invention concerns a novel post-transcriptional regulatory element (PRE) that can function as a RNA nucleocytoplasmic transport element (NCTE) and its inclusion in expression cassettes and recombinant viruses, including in recombinant attenuated HIV strains. HIV regulates its expression by controlling the nuclear transport of unspliced mRNA encoding structural proteins utilizing the Rev/RRE system. RRE (Rev Responsible Element) is an HIV encoded NCTE, which is part of every HIV RNA encoding the structural genes (gag/pol and env). Rev is an HIV encoded protein that binds to RRE. This interaction is essential for the nucleocytoplasmic transport of the RRE-containing viral mRNAs and the expression of Gag/Pol and Env proteins in transport. The invention discusses an attenuated HIV produced by disabling rev/RRE by point mutations and inserting in its place the novel PRE of the invention. The resultant HIV is attenuated between 50 and 200 fold compared to wild-type HIV. In addition to HIV, the novel PRE element can increase expression from many mRNAs not efficiently transported on their own.

In addition to licensing, the technology is available for further development through collaborative

research opportunities with the inventors.

Dated: October 25, 2005.

**Steven M. Ferguson,**

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

[FR Doc. 05-21832 Filed 11-1-05; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### 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 the following 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 contract proposals and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the contract proposals, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

*Name of Committee:* National Cancer Institute Special Emphasis Panel, SBIR Topic 186 Phase II: Target Based High Throughput Screening for the Identification of Radioprotector.

*Date:* November 22, 2005.

*Time:* 1 p.m. to 3 p.m.

*Agenda:* To review and evaluate contract proposals.

*Place:* National Institutes of Health, 6116 Executive Boulevard, Rockville, MD 20852, (Telephone Conference Call).

*Contact Person:* C. Michael Kerwin, PhD, MPH, Scientific Review Administrator, Special Review and Logistics Branch, Division of Extramural Activities, National Cancer Institute, National Institute of Health, 6116 Executive Boulevard, Room 8057, MSC 8329, Bethesda, MD 20892-8329. (301) 496-7421. [kerwinm@mail.nih.gov](mailto:kerwinm@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.392, Cancer Construction; 93.393, Cancer Cause and Prevention Research; 93.394, Cancer Detection and Diagnosis Research; 93.395, Cancer Treatment Research; 93.396, Cancer Biology Research; 93.397, Cancer Centers Support; 93.398, Cancer Research Manpower; 93.399, Cancer Control, National Institutes of Health, HHS)

Dated: October 25, 2005.

**Anthony M. Coelho, Jr.,**

*Acting Director, Office of Federal Advisory Committee Policy.*

[FR Doc. 05-21825 Filed 11-1-05; 8:45 am]

**BILLING CODE 4140-01-M**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Institute of Aging; 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.

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 Institute on Aging Special Emphasis Panel, ROS and Aging.

*Date:* November 9, 2005.

*Time:* 12 p.m. to 5 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, Gateway Building, 7201 Wisconsin Avenue, Bethesda, MD 20892, (Telephone Conference Call).

*Contact Person:* Alessandra M. Bini, PhD, Scientific Review Office, National Institute of Aging, National Institutes of Health, 7201 Wisconsin Avenue, Bethesda MD 20892, 301-402-7708, [binia@nia.nih.gov](mailto:binia@nia.nih.gov).

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

*Name of Committee:* National Institute on Aging Emphasis Panel, "DNA and aging brain".

*Date:* November 28-29, 2005.

*Time:* 6 p.m. to 5 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Holiday Inn Chevy Chase, 5520 Wisconsin Avenue, Chevy Chase, MD 20815.

*Contact Person:* Louise L. Hsu, PhD, Health Scientist Administrator, Scientific Review Office, National Institute on Aging, Gateway Building, 7201 Wisconsin Avenue/Suite 2C212, Bethesda, MD 20892, (301) 496-7705, [hsul@exmur.nih.gov](mailto:hsul@exmur.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.866, Aging Research, National Institutes of Health, HHS)

Dated: October 25, 2005.

**Anthony M. Coelho, Jr.,**

*Acting Director, Office of Federal Advisory Committee Policy.*

[FR Doc. 05-21824 Filed 11-1-05; 8:45 am]

**BILLING CODE 4140-01-M**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Institute of Child Health and Human Development; 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.

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 Institute of Child Health and Human Development Special Emphasis Panel, Mechanisms of Mammalian Sperm Capacitation.

*Date:* November 23, 2005.

*Time:* 10 a.m. to 12 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6100 Executive Boulevard, Room 5B01, Rockville, MD 20852, (Telephone Conference Call).

*Contact Person:* Jon M. Ranhand, PhD, Scientist Review Administrator, Division of Scientific Review, National Institute of Child Health and Human Development, NIH, 6100 Executive Boulevard, Room 5B01, Bethesda, MD 20892, (301) 435-6884. [ranhandj@mail.nih.gov](mailto:ranhandj@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.864, Population Research; 93.865, Research for Mothers and Children; 93.929, Center for Medical Rehabilitation Research; 93.209, Contraception and Infertility Loan Repayment Program, National Institutes of Health, HHS)

Dated: October 25, 2005.

**Anthony M. Coelho, Jr.,**

*Acting Director, Office of Federal Advisory Committee Policy.*

[FR Doc. 05-21826 Filed 11-1-05; 8:45 am]

**BILLING CODE 4140-01-M**