varium; (3) a purified nucleic acid molecule that comprises a sequence which encodes an amino acid sequence homologous to Scytovirin; (4) a vector comprising the isolated and purified nucleic acid molecule and a host cell or organism comprising the vector; (5) a conjugate comprising the peptide and an effector component; and (6) a method of inhibiting prophylactically and therapeutically a viral infection. Thus, this invention may represent potential new therapeutics for treatment of retroviral infections, including AIDS. This invention is further described in Bokesch *et al.*, ''A Potent Anti-HIV Protein from the Cultured Cyanobacteria Scytonema varium,'' Biochemistry, 2003, 42, 2578–2584.

Benzoylalkylindolepyridinium Compounds and Pharmaceutical Compositions Comprising Such Compounds

William G. Rice, Mingjun Huang, Robert W. Buckheit, Jr., David G. Covell, Grzegorz Czerwinski, Christopher Michejda, and Vadim Makarov (NCI).

DHHS Reference No. E–278–98/1 filed 18 Dec 2000 (PCT/US01/48311).

Licensing Contact: Sally Hu; (301) 435–5606; e-mail: *hus@od.nih.gov.*

The present invention provides novel antiviral compounds active against HIV. These compounds, referred to as benzoylalkylindolepyridinium compounds (BAIPs) are effective against HIV isolates that have developed mutations rendering conventional drugs ineffective. BAIPs apparently do not require intracellular phosphorylation nor bind to the reverse transcriptase (RT) active site, which distinguishes their mechanism of action from the dideoxynucleoside (ddN) and acyclic nucleoside phosphonate (ANP) nucleoside analog drugs. ddN and ANP have proven clinically effective against limited human immunodeficiency virus (HIV) infection, but resistance rapidly emerges due to mutations in and around the RT active site. The BAIPs also may be distinguished from non-nucleoside reverse transcriptase inhibitors (NNRTIs), in part because the BAIPs bind to a different site on the RT enzyme. The usage of NNRTIs is limited by the rapid emergence of resistant strains also. Moreover, unlike the NNRTIs, BAIPs of the present invention have been shown to be effective against HIV-1, HIV-2 and simian immunodeficiency virus (SIV) proliferation. Thus, BAIPs are broadly antiviral, non-nucleoside reverse transcriptase inhibitors (BANNRTIs).

Spontaneous Breathing Apparatus and Method

Theodor Kolobow (NHLBI).

Serial No. 08/933,003 filed 18 Sep 1997; PCT/US98/19714 filed 18 Sep 1998; Serial No. 09/555,229 filed 26 May 2000.

Licensing Contact: Michael Shmilovich; 301/435–5019; email: *mish@codon.nih.gov.*

A novel assisted breathing system and method that greatly decreases/eliminates the work of breathing and is under the total control of the patient.

The system includes a minitracheostomy tube, a reverse thrust gas insufflation catheter introduced through a special minitracheostomy tube to deliver well humidified air/oxygen to near the carina, and a threshold valve to limit airway plateau pressure. Inspiration is effected through spontaneous closing of the glottic opening, while expiration follows opening of the glottis. The patient can control the rate of respiration and tidal volumes. Lung inflation is therefore passive and accounts for the nominal work of breathing. Speech, sound, and coughing ability remains unimpeded.

Ultrasound-Hall Effect Imaging System And Method

Han Wen (NHLBI).

Serial No. 60/021,204 filed 03 Jul 1996; PCT/US97/11272 filed 02 Jul 1997; Serial No. 09/202,459 filed 14 Dec 1998; and related foreign patent applications.

Licensing Contact: Michael Shmilovich; (301) 435–5019; email: *mish@codon.nih.gov*.

The invention provides for a novel ultrasound-based imaging modality that is based on the interaction of a static magnetic field and conductive moieties in the imaged sample under electrical excitation. The invention also provides a novel ultrasound-based imaging modality that provides a contrast mechanism which reflects the conductivity distribution of the medium being imaged. The disclosed methods and system have the following advantages over other ultrasonic imaging systems: (a) The method is not limited to contrast based solely on acoustic properties; (b) it dispenses with acoustic beam excitation and is suitable for fast 2D and 3D image formation with wide angle signal reception. A working prototype system has been constructed and demonstrated 3D imaging. Results are published in peer reviewed journals: H. Wen, Ultrason. Imaging 2000 Apr;22(2):123–136; H. Wen, Ultrason. Imaging 1999 Jul;21(3):186–200; H. Wen *et al.*, Ultrason. Imaging 1998 Jul;20(3):206–220; H. Wen *et al.*, IEEE TransBiomed. Eng. 1998 Jan;45(1):119–124.

Dated: April 8, 2003.

Steven M. Ferguson,

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

[FR Doc. 03–9285 Filed 4–15–03; 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.

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.

Mutant A. nidulans Strains Requiring Anticancer or Antifungal Compounds for Growth

Katherine Jung *et al.* (NCI)

DHHS Reference No. E–312–2002/0 (Biological Materials)

Licensing Contact: Susan Ano; 301/435–5515; *anos@od.nih.gov.*

This technology describes four genetically modified strains of Aspergillus nidulans that bear mutations in the gene encoding γ-tubulin, a protein required for initiation of microtubule formation and mitosis. As a result of the mutations, these strains require the presence of an antimicrotubule agent as either an absolute or conditional requirement for growth, making the strains useful for

drug discovery screens. Related proteins α- and β-tubulin, which form the actual microtubules, are used in drug discovery efforts for anticancer drugs and are the targets of chemotherapeutics paclitaxel and vincristine. Significantly, identifying compounds that affect γ-tubulin function, which is fundamentally different than that of α- and β-tubulin, could lead to new types or classes of anticancer or antifungal compounds that act in a different manner. Furthermore, use of these strains in drug discovery offers the advantage of detecting growth against a background of no growth, compared to more typical methods of detecting decreased growth. Additionally, since microtubules are involved in a myriad of cell processes such as cell division, cell motility, and intracellular transport; these mutant strains could be useful in the study of these processes. These cell lines are available for licensing through Biological Materials Licenses. Related research has been published in Jung *et al.*, Mol. Biol. Cell 12: 2119–2136, 2001.

Mutant S. pombe Strains Carrying a Human γ-tubulin Gene or a Multicopy S. pombe γ-tubulin Plasmid

Katherine Jung *et al.* (NCI)
DHHS Reference No. E–313–2002/0 (Biological Materials)
Licensing Contact: Susan Ano; 301/435–5515; *anos@od.nih.gov.*

This technology describes two strains of Schizosaccharomyces pombe that have been genetically modified to affect the expression of γ-tubulin, a protein required for initiation of microtubule formation and mitosis. One strain carries a null mutation for expression of its γ-tubulin gene but has been transformed with DNA encoding human γ-tubulin. The second strain carries the S. pombe γ-tubulin gene on a multicopy plasmid and thus overexpresses S. pombe γ-tubulin. Since microtubules are involved in a myriad of cell processes such as cell division, cell motility, and intracellular transport, these mutant strains could be useful in the study of these and other processes, in particular by screening to discover compounds of medical and agricultural use. Specifically, the S. pombe strain carrying the human γ-tubulin gene could be used to identify potential antineoplastic agents, since compounds that specifically inhibit the growth of this strain will target human γ-tubulin. Compounds that inhibited growth of the strain overexpressing fungal γ-tubulin but not human γ-tubulin would be potential antifungal agents. These cell lines are available for licensing through Biological Materials Licenses. Related research has been published in Horio & Oakley, J. Cell Biol. 126: 1465–1473, 1994.

Polyclonal Antibodies Specific to Phosphorylation and Acetylation Sites of Human p53

Dr. Ettore Appella (NCI)
DHHS Reference No. E–262–2002/0
Licensing Contact: Sally Hu; 301/435–5606; *hus@od.nih.gov.*

This invention describes the antibodies that are specific to phosphorylated and acetylated sites of p53 and might be used as a powerful tool to study the function of the modifications and the mechanisms that regulate activation of p53. Those polyclonal antibodies have been raised by inoculating an animal with synthetic peptide mimicking the modified residue and its surrounding under conditions which elicit immune response. Those antibodies also can be used in medical diagnostics. They can be applied to monitor activity of corresponding enzymes, which catalyze the particular modification in the state of phosphorylation and acetylation of p53. The polyclonal antibodies from this invention are available for licensing via biological material licenses (BML).

Method for the Diagnosis and Treatment of Vascular Disease

Toren Finkel *et al.* (NHLBI)
DHHS Reference Nos. E–037–2003 filed 15 Nov 2002 and E–125–2003 filed 05 Feb 2003
Licensing Contact: Fatima Sayyid, 301/435–4521; *sayyidf@od.nih.gov.*

Cardiovascular disease is a major health risk throughout the industrialized world. Atherosclerosis, the most prevalent of cardiovascular diseases, is the principal cause of heart attack, stroke, and gangrene of the extremities. It is also the principal cause of death in the United States.

This invention portrays a method for diagnosing decreased vascular function, detecting increased cardiovascular risk and diagnosing atherosclerosis. An embodiment includes assaying the number of endothelial progenitor cells and treating a subject with decreased vascular function by administering a therapeutically effective amount of endothelial progenitor cells.

Related research has been published in Hill *et al.*, New England Journal of Medicine 348: 593–600 Feb 13 2003.

Cyr61 as a Marker for Acute Renal Failure

Drs. Robert A. Star and Yasunari Muramatsu (NIDDK)
Provisional Patent Application Serial No. 60/367,411 filed 25 Mar 2002
Licensing Contact: Pradeep Ghosh; 301/435–5282; *ghoshp@od.nih.gov.*

This invention relates to a method of diagnosing Acute Renal Failure (ARF) at an early stage by determining urinary cysteine-rich protein, Cyr61 levels and a method for treating early ARF by administering Cyr61. Acute renal failure is a disease of high morbidity and mortality and therapeutic interventions are still lacking. The invention is based on the fact that acute renal ischemia is associated with increased Cyr61 mRNA and protein levels. Cyr61 is a member of connective tissue growth factor family and plays an important role in the wound repair and neovascularization process. Increased expression of Cyr61 mRNA in ARF results in enhanced synthesis of Cyr61 protein and because Cyr61 is a secreted protein, the urine level of Cyr61 increases in ARF patients. Increased levels of urinary Cyr61 may thus have a potential as a diagnostic marker for ARF. In addition, because of its neovascularization properties, administration of Cyr61 may stimulate the renal repair process and/or prevent renal injury. Therefore, Cyr61 is a biomarker that also has potential therapeutic use for the treatment of ARF in patients with ischemia, sepsis, or following renal transplantation.

Dated: April 8, 2003.

Steven M. Ferguson,

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

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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.