McKay (NINDS). U.S. Patent Application filed 14 Oct 2004 (DHHS Reference No. E–125–2004/0–US–01).

Licensing Contact: Michael Shmilovich; 301/435–5019; *shmilovm@mail.nih.gov.*

Available for licensing and commercial development is a cell culture tool kit for etching confined growth areas on substrates coated with tissue culture growth matrix, such as fibronectin. The kit includes three components: an etching comb (etcher) with rectangular teats, a back plate, and an open chamber with guides to direct the etcher.

Overview: Cells are plated over a glass cover slide previously coated with growth matrix. Perpendicular channels are etched into the culture, removing both growth matrix and plated cells, resulting in rectangular growth areas containing only the cells plated originally to each growth area. This protocol allows high-density cultures to grow freely within a confined growth area. Specifically, this procedure prevents emigration out of the growth area and also prevents immigration from individual cells or sphere clusters into the growth area, common if cells are plated on pre-defined surfaces.

Method: A coated cover slide is plated with cells. The cover slide is then sandwiched between the back plate, and open chamber with etching guides, then secured in place. The chamber is filled with media and the etcher is drawn across the cover slip to generate a first set of channels. The etcher is then drawn across the cover slip in a perpendicular direction to generate a second set of channels, resulting in rectangular growth areas. The number of the teats on the etcher determines the number of squares in the grid, the width of each teat will determine the distance between the squares and the gap between the teats will determine the size of the squares.

This tool kit enables the production of a slide for monitoring dynamic cell processes especially for the proliferation and migration of stem cells or other migratory cells. Beside complexity, a significant problem with existing containment systems is the inability to keep cells within the field of observation and to keep out cells not present in the field of view at the onset of the experiment. The present invention provides a simple and flexible solution that enables long-term cell culture in a defined growth area.

Chlorine Dioxide Gas Decontamination Apparatus

Deborah E. Wilson, D.Ph. (ORS). U.S. Provisional Application 60/620,095 filed 18 Oct 2004 (DHHS Reference No. E–190–2004/0-US–01).

Licensing Contact: Michael Shmilovich; 301/435–5019; *shmilovm@mail.nih.gov.*

Available for licensing and commercial development is an apparatus for decontaminating articles and areas contaminated with one or more biosafety level 2, 3, or 4 pathogens. Particularly, the focus of decontamination is a piece of laboratory equipment, such as a biological safety cabinet. The apparatus is portable, and includes a moveable cart, a source of chlorine dioxide gas, a humidification means, an inlet conduit for introducing a flow of chlorine dioxide gas from the source of chlorine dioxide gas into the environment and for simultaneously humidifying the environment, and an outlet conduit for withdrawing gas from the environment. The apparatus further includes a blower for circulating gas between the environment to the humidifier and vice versa. Of particular advantage, the moveable cart weighs less than 200 pounds. The patent application covering this apparatus can be reviewed under a confidentiality nondisclosure agreement.

Dated: December 9, 2004.

Steven M. Ferguson,

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

[FR Doc. 04–27723 Filed 12–17–04; 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 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.

Methods and Compositions for Protecting Cells From Ultrasound-Mediated Cytolysis

Joe Z. Sostaric (NCI), Norio Miyoshi (EM), Peter Riesz (NCI).

U.S. Provisional Application No. 60/620,258 filed 19 Oct 2004 (DHHS Reference No. E–311–2004/0–US–01).

Licensing Contact: Michael Shmilovich; 301/435–5019; *shmilovm@mail.nih.gov.*

Available for licensing and commercial development are methods for protecting cells from ultrasound-mediated cytolysis. Therapeutic uses of ultrasound (*e.g.*, sonoporation, thrombolysis, HIFU, sonophoresis, acoustic hemostasis) may induce changes in tissue state, including apoptosis and cytolysis, through thermal effects (*e.g.*, hyperthermia), mechanical effects (*e.g.*, acoustic cavitation or through radiation force, acoustic streaming and other ultrasound induced forces), and chemical effects (via sonochemistry or by the activation of solutes by sonoluminescence). Furthermore, ultrasound exposure conditions in biological processes, *e.g.* ultrasound bioreactors, are limited by the need to decrease cytolysis of microbes or animal and plant cells. Accordingly, the protecting molecules used to carry out the methods of the invention possess the ability to protect cells against ultrasound mediated cytolysis, without hindering ultrasound induced physical effects that could be utilized to create beneficial effects. The protecting solutes are surface active and possess at least one ''carbohydrate unit'' as described. The solutes include, but are not limited to: alkyl-β-D-thioglucopyranoside, alkyl-β-D-thiomaltopyranoside, alkyl-β-D-galactopyranoside, alkyl-β-D-thiogalactopyranoside, or alkyl-β-D-maltrioside, hexyl-β-D-glucopyranoside, heptyl-β-D-glucopyranoside, octyl-β-D-glucopyranoside, nonyl-β-D-glucopyranoside, hexyl-β-D-maltopyranoside, n-octyl-β-D-maltopyranoside, n-octyl-β-D-thioglucopyranoside, 2-propyl-1-pentyl-β-D-maltopyranoside, methyl-6-O-(N-heptylcarbamoyl)-α-D-glucopyranoside, 3-cyclohexyl-1-propyl-β-D-glucoside, 6-O-methyl-n-heptylcarboxyl-α-D-glucopyranoside.

In addition to licensing, the technology is available for further

development through collaborative research with the inventors via a Cooperative Research and Development Agreement (CRADA).

Treatment of Human Viral Infections (Imatinib)

Drs. Steven Zeichner and Vyjayanthi Krishnan (NCI).

U.S. Provisional Application No. 60/588,015 filed 13 Jul 2004 (DHHS Reference No. E–281–2004/0–US–01).

Licensing Contact: Sally Hu; 301/435–5606; *hus@mail.nih.gov.*

This application describes the methods for treating or preventing a HIV infection by the administration of *abl*-kinase inhibitor called imatinib and its derivatives. Several available agents can inhibit HIV replication by targeting one or another viral protein, such as the viral reverse transcriptase, protease, envelope fusion process, or integrase, or by targeting the interaction of a viral component with a host cell component, for example the host cell viral receptor or co-receptor. However, HIV can readily become resistant to these drugs, and new therapeutic approaches for HIV infection are needed. The studies described in the application show that the expression of many host cell genes changes in response to HIV replication, and show that targeting one of these changes with imatinib can inhibit viral replication. Thus targeting the host cell, and making the host cell less hospitable to the virus can inhibit viral replication. The application thus describes a new agent that inhibits viral replication by acting on the host cell, which may offer new approaches to therapy for HIV infection. These approaches may be less likely to engender rapid resistance in the virus to the therapy.

This abstract replaces one published in the **Federal Register** on Friday, October 22, 2004 (69 FR 62060).

Dated: December 13, 2004.

Steven M. Ferguson,

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

[FR Doc. 04–27780 Filed 12–17–04; 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 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.

AAV4 Vector and Uses Thereof

John A. Chiorini (NHLBI/NIDCR), Robert M. Kotin (NHLBI), Brian Safer (NHLBI). U.S. Patent 6,468,524 issued 22 Oct 2002 (DHHS Reference No. E–071–2000/0–US–01).

Licensing Contact: Jesse Kindra; (301) 435–5559; *kindraj@mail.nih.gov*.

The invention described and claimed in this patent application relates to the delivery of heterologous nucleic acids or genes to particular target cells. In particular, the application relates to methods of delivering a heterologous nucleic acid or gene of interest to particular target cells using Adeno-Associated Virus of serotype 4 (AAV4). The particular target cells identified are the ependymal cells of the brain. The methods described herein may be useful in carrying out gene therapy for diseases of the brain or central nervous system.

This work has been published in part at Davidson, BL, *et al.* ''Recombinant adeno-associated virus type 2, 4, and 5 vectors: transduction of variant cell types and regions in the mammalian central nervous system'' PNAS USA 97(7):3428–32 (March 28, 2000).

In addition, PHS owns additional intellectual property related to this technology describing an AAV4-based vector system. The material contained in the patent application has been published as WO 98/11244 (March 19, 1998) and the research corresponding thereto has been published in J. Virology 71(9): 6823–33 (Sept 1997).

AAV5 Vector for Transducing Brain Cells and Lung Cells

John A. Chiorini (NHLBI/NIDCR), Robert M. Kotin (NHLBI).

U.S. Patent Application No. 09/533,427 filed 22 Mar 2000 (DHHS Reference No. E–072–2000/0–US–01).

Licensing Contact: Jesse Kindra; (301) 435–5559; *kindraj@mail.nih.gov*.

The invention described and claimed in this patent application is related to the delivery of heterologous nucleic acids or genes to particular target cells. In particular, the application relates to methods of delivering a heterologous nucleic acid or gene of interest to particular target cells using an Adeno-Associated Virus of serotype 5 (AAV5). The particular target cells identified include the alveolar cells of the lung and cerebellar and ependymal cells of the brain. The methods described herein may be useful in carrying out gene therapy related to diseases of the brain or central nervous system and the respiratory tract.

This work has been published, in part, at Davidson BL, *et al.* PNAS, USA 97(7):3428–32 (March 28, 2000) and Zabner J, *et al.* J Virol. 74(8):3852–8 (April 2000).

In addition to this patent application, PHS owns additional intellectual property related to this technology. The patent application has been published as WO 99/61601 on December 2, 1999 and the research corresponding thereto has been published at Chiorini JA, *et al.* J. Virol. 73(5): 4293–98 (May 1999) and Chiorini JA, *et al.* J. Virol. 73(2): 1309–19 (Feb. 1999).

TTP as a Regulator of GM-CSF mRNA Deadenylation and Stability

Ester Carballo-Jane, Wi S. Lai, Perry J. Blackshear (NIEHS). U.S. Provisional Application No. 60/148,810 filed 13 Aug 1999 (DHHS Reference No. E–204–1999/0–US–01); PCT Application No. PCT/US00/22199 filed 12 Aug 2000, which published as WO 01/12213 on 22 Feb 2001 (DHHS Reference No. E–204–1999/0–PCT–02); U.S. Patent Application No. 10/049,586 filed 12 Feb 2002 (DHHS Reference No. E–204–1999/0–US–03).

Licensing Contact: Jesse Kindra; (301) 435–5559; *kindraj@mail.nih.gov*.

The disclosed invention provides materials and methods to treat granulocytopenia (low white cell count in the blood) which is characterized by a reduced number of granulocytes (relative) or an absence of granulocytes (absolute). This condition is commonly associated with cancer chemotherapy, but is seen less frequently in a number of conditions including the use of propylthiouracil, radiotherapy for marrow ablation for bone marrow transplantation, aplastic anemia, systemic lupus erythematosus, AIDS and a variety of other situations. The