efficiency, high throughput systems for protein production or analysis at lower cost and ease of scale-up would be potential licensors of this technology.

Development Status: Late Stage

Ready for Production.

Inventors: Joseph Shiloach (NIDDK), Pratik Jaluria (NIDDK).


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

Licensing Contact: Peter A. Soukas, J.D.; 301–435–4646; soukasp@mail.nih.gov.

Collaborative Research Opportunity: The National Institute of Diabetes and Digestive and Kidney Diseases, Biotechnology Core Laboratory, is seeking parties interested in collaborative research projects directed toward the use of this technology with cells for drug and vaccine production and development, including growth optimization, production and product recovery processes. For more information, please contact Dr. Joseph Shiloach, josephs@intra.niddk.nih.gov, or Rochelle S. Blaustein at Rochelle.Blaustein@nih.gov.

In Vitro Model for Hepatitis C Virion Production

Description of Technology: This invention provides an in vitro hepatitis C virus (HCV) replication system that is capable of producing viral particles in a culture medium. Hepatitis C is a major public health problem, the development of therapeutics for which has been hampered by a lack of a robust model system to study the complete viral life cycle. This invention provides a new model system for the complete replication cycle of hepatitis C virus and virion production, assembly and release. The model is useful for screening antiviral agents against HCV.

A full length HCV construct, CG1b of genotype 1b which is known to be infectious, was placed between two ribozymes designed to generate the exact 5' and 3' ends of HCV when cleaved. Using this system, HCV proteins and positive and negative RNA strands have been shown to reproduce intracellularly, and viral particles that resemble authentic HCV virions are produced and secreted into the culture medium.

The patent application includes claims directed toward the following: A construct comprising specific nucleic acid sequences including HCV genotype 1b, genotype 1a, genotype 2a or potentially other genotypes; a method for identifying a cell line that is permissive for infection with HCV; a method for propagating HCV in vitro; a method for screening agents capable of modulating HCV replication or activity; a method for testing the level of HCV replication or activity; a HCV vaccine comprising HCV virus particles.

Applications: The model offers a novel method for investigating the entire HCV life cycle including replication and pathogenesis and is useful for high-throughput antiviral screening. This technique may also be useful for making infectious particles that are useful in the production of HCV vaccines.

Advantages: This system provides a new, stable and efficient cell culture model to further study the life cycle and biology of HCV, and to test potential therapeutic targets for hepatitis C. This model has also been used to generate in cell culture HCV strains infectious for chimpanzees, the only experimental animal susceptible to infection with the hepatitis C virus, a critical step in the development of new vaccines for Hepatitis C.

Market: Hepatitis C virus (HCV) chronically infects approximately 200 million people worldwide and increases the risk of developing cirrhosis and hepatocellular carcinoma. This technology would be useful for studying the HCV life cycle, screening for therapeutic agents against multiple HCV strains, including Genotype 1a, 1b and 2a, and the development of HCV vaccines. HCV genotypes 1 and 2 are the major genotypes with worldwide distribution; they are known to be associated with different clinical profiles and therapeutic responses. Hence, the model may be used to screen for varying levels of effectiveness of therapeutics against the major HCV genotypes.

Development Status: This technology is available for use in diagnostics, drug/vaccine discovery, production and development. Current work is directed toward studies into the HCV life cycle and replication and the pathogenesis of HCV screening for antiviral agents against multiple HCV strains. This model has been used to generate in cell culture HCV strains infectious for chimpanzees, the only experimental animal susceptible to infection with the hepatitis C virus, a critical step in the development of new vaccines for Hepatitis C. Future work may be directed toward the use of this system for development of vaccine candidates against HCV.

Inventors: T. Jake Liang and Theo Heller (NIDDK).

Related Publications:


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

Licensing Contact: Peter A. Soukas, J.D.; 301–435–4646; soukasp@mail.nih.gov.

Collaborative Research Opportunity: The National Institute of Diabetes and Digestive and Kidney Diseases, Liver Diseases Branch, is seeking parties interested in collaborative research directed toward molecular strategies for vaccine and antiviral development, and animal models of viral hepatitis C. For more information, please contact Dr. T. Jake Liang at 301–496–1721 or Jake@nih.gov or Rochelle S. Blaustein at Rochelle.Blaustein@nih.gov.


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

[FR Doc. E8–21507 Filed 9–15–08; 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.

**Cyclized NGR Peptide for Tumor Targeting**

*Description of Technology:* Available for licensing and commercial development are patent rights and materials related to NGR peptides for targeting therapeutic and diagnostic agents to cancer cells. Specifically targeted are tumors that express aminopeptidase N isoform CD13. NGR peptides include the Asn-Gly-Arg peptide motif, a ligand for APN/CD13. NGR-containing peptides have been proven useful for delivering cytotoxic drugs, apoptotic peptides, and cytokines (such as tumor necrosis factor (TNF)) to tumor vasculature. In some embodiments of the invention, the NGR peptide is conjugated with a diagnostic moiety such as a fluorophore, nonmetallic isotope, an optical reporter, a boron neutron absorber, a paramagnetic metal ion, a ferromagnetic metal, a gamma-emitting radioisotope, a positron-emitting radioisotope, or an x-ray absorber. In another embodiment, the peptide can be conjugated with a therapeutic such as daunorubicin, doxorubicin, epirubicin, idarubicin, mitoxantrone, or a combination of these. The therapeutic agent, such as an anti-tumor or anti-neoplastic agent of choice, can be entrapped within a liposome; the liposomes are formulated to be of a size known to penetrate the endothelial and basement membrane barriers. The resulting liposomal formulation can be administered parenterally to a subject in need of such treatment, preferably by intravenous administration. Tumors characterized by an acute increase in permeability of the vasculature in the region of tumor growth are particularly suited for treatment by the present invention.

![Figure 1. Illustration of exemplary molecule: Conjugated fluorophore](image1)

![Figure 2. Illustration of exemplary molecule: Phospholipid](image2)

**Applications:**
- Cancer diagnostics
- Cancer therapeutics
- Anti-angiogenesis
- Imaging

**Inventors:** Bradford Wood, Matthew Dreher, Ayele Negussie (CC).

**Relevant Publications:**


• Magnetic Resonance Imaging
• Cancer
• Cardiovascular diseases imaging
• Drug development
• Drug candidate distribution tracking
• Diagnostics
• Microfluidics

Inventors: Gary Zabow, Stephen Dodd (NINDS), Alan Koretsky (NINDS), John Moreland (NIH).

Publications:
2. KA Hinds et al. Highly efficient endosomal labeling of progenitor and stem cells with large magnetic particles allows magnetic resonance imaging of single cells. Blood 2003 Aug 1;102(3):867–872.

Licensing Status: Available for licensing.

Licensing Contact: Michael A. Shmilovich, Esq.; 301–435–5019; shmilovm@mail.nih.gov.

Microfabricated Particles Useful as MRI Contrast Agents

Description of Technology: MRI contrast agents are versatile yet lack the sensitivity and multiplexing capabilities of optical agents. Available for licensing is an invention pertaining to microfabricated structures that can be used as MRI contrast agents with enhanced functionality or as micro-RFID (radio-frequency identification) tags. The microstructures can be engineered to appear as different effective colors when resolved using MRI as opposed to strictly grey-scale contrast of existing MRI agents. In this way they can be thought as radio-frequency analogs to quantum dots. A set of agents could be produced that would enable in vivo labeling and tracking of multiple different types of cells simultaneously. The agents can also act as radio-frequency probes of various physiological conditions. The invention can include a plurality of microstructures dispersed a liquid. The structures can have magnetic portions that vary in size, thickness and shape that are arranged to provide a substantially uniform Larmor precession frequency or a characteristic substantially uniform shift in Larmor precession frequency experienced by nuclear magnetic moments of a material when it is located in the substantially uniform field region created by the magnetic portions. In some embodiments, each of the nuclear magnetic resonance microstructures has a maximum dimension less than about 1 mm. The magnetic portions of the microstructure can be arranged proximate to each other, in contact with each other or be partially, substantially or totally coincident.

Applications:

• Magnetic Resonance Imaging
• MRI guided surgery

Inventors: Ozgur Kocaturk (NHLBI).

Publications:

Licensing Status: Available for licensing.

Licensing Contact: Michael A. Shmilovich, Esq.; 301–435–5019; shmilovm@mail.nih.gov.

Active Guidewire Visualization Device and System for MRI Guided Interventions

Description of Technology: Available for licensing and commercial development is a guidewire device and system for MRI guidance of vascular interventions. The guidewire design, and its coupled system, enables interventionalists to visualize the location of the tip and distal shaft of an MRI compatible guidewire relative to the vascular system and surrounding anatomy. Visualization of both the shaft and tip enables interventionalists to advance the guidewire through tortuous vessels reducing the risk of puncturing vessel walls and also steering it through labyrinthine vasculature. The guidewire provided by the present invention includes distal and proximal ends with a space therein, a dipole antenna disposed in the space reserved within the guidewire body, the dipole antenna being adapted to be electrically connected to a signal processing system through a first signal channel through the proximal end of the guidewire body, and a loop antenna disposed in the space reserved within the guidewire body toward the distal end of the guidewire body, the loop antenna being adapted to be electrically connected to the signal processing system through a second signal channel through the proximal end of the guidewire body. The dipole antenna and the loop antenna are each constructed to receive magnetic resonance imaging signals independently of each other and transmit received signals through the first and second signal channels, respectively, to be received by the signal processing system. More specifically, both loop and dipole antenna are tuned to resonate at the same Larmour frequency as produced by the magnet.

Applications:

• Interventional cardiology
• MRI guided surgery
null
Publications:


Patent Status:
- International Patent Application PCT/US00/17755, which published as WO 2001/04335 on 09 Jan 2001 (expired)
- Australian Patent 784216
- Chinese Patent 00810119.1
- Canadian Patent Application 2378552
- European Patent Application 00941756.9
- Israeli Patent Application 147447
- Brazilian Patent Application PI0013195–4 and
- Chinese Patent Application 200710167112.6

HHS Reference No. E–178–1999/1—


Licensing Status: Available for licensing.

Licensing Contact: Michael A. Shmilovich, Esq.; 301–435–5019; shmilovm@mail.nih.gov.

Collaborative Research Opportunity:
The NIAID Office of Technology Development is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize attenuated live vaccines against respiratory syncytial virus (RSV). Please contact Barry Buchbinder at 301–594–1696 for more information.

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

FR Doc. E8–21519 Filed 9–15–08; 8:45 am
BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Cancer Institute; Notice of Meeting

Pursuant to section 10(a) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of a meeting of the National Cancer Institute Director’s Consumer Liaison Group.

The meeting will be open to the public, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

Name of Committee: National Cancer Institute Director’s Consumer Liaison Group.
Date: October 14–15, 2008.
Time: 8 a.m. to 5 p.m.
Agenda: (1) Approval of Minutes; (2) Report from Dr. John Niederhuber, NCI Director; (3) Report on the OAR; (4) Report from Planning & Office of Governmental & Congressional Relations OD/NCI; (5) Indian Health Service & Cancer Issues of Native Americans; (6) Cancer Health Communications; (7) Update-NCI Community Cancer Clinics Program; (8) Reports from DCLG Working Groups & Member Updates; (9) Public Comment; (10) Action Items/Conclusion.
Place: National Institutes of Health, Building 31, Conference Room 6, 31 Center Drive, Bethesda, MD 20892.
Contact Person: Shannon K. Bell, MSW, Executive Secretary, National Cancer Institute, National Institutes of Health, 31 Center Drive, Building 31, Room 10A30D, Bethesda, MD 20892, 301–481–3393.
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 onto the NIH campus. All visitor vehicles, including taxicabs, hotel, and airport shuttles will be inspected before being allowed on campus. Visitors will be asked to show one form of identification (for example, a government-issued photo ID, driver’s license, or passport) and to state the purpose of their visit.
Information is also available on the Institute’s/Center’s home page: http://