of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852–3804; telephone: 301/435–4632; fax: 301/402–0220; e-mail: *heftib@mail.nih.gov.* A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

LMB–2, An Immunotoxin That Shows Efficacy in Phase I Clinical Trials in Treating Patients With Chemotherapy-Resistant Hairy Cell Leukemia and Other Hematologic Malignancies

A number of patents and patent applications cover this technology, including but not limited to:

''Reduction of the nonspecific animal toxicity of immunotoxins by mutating the framework regions of the Fv to lower the isoelectric point,'' PCT/US01/43602, by Pastan, Onda, Nagata, Tsutsumi, Vincent, Kreitman, Vasmatzis, and Lee. (DHHS Ref. E–146–1999/0); and

''Recombinant antibody-toxin fusion protein,'' PCT/US90/02097, U.S. Patents 6,051,405, 5.863,745, and 5,696,237, by Fitzgerald, Chaudhary, Pastan, and Waldmann. (DHHS Ref. E–135–1989/0)

The invention provides a recombinant immunotoxin, LMB–2 [anti-Tac(Fv)–PE38], that has been used in Phase I trials to treat hematologic malignancies. The antibody portion of the immunotoxin is an Fv fragment (antigen-binding fragment) of the anti-Tac antibody, and it is fused to truncated Pseudomonas Exotoxin (PE38). This immunotoxin has been used in a Phase I clinical trial (Kreitman *et al.*, 2000; J Clin Oncol 18:1622–1636). Thirty five (35) patients with CD25-expressing hematologic malignancies, for whom standard and salvage therapies failed, were treated with LMB–2. All four patients with hairy cell leukemia (HCL) responded to treatment, and one patient achieved a complete remission that lasted for more than 20 months. Seven partial responses were observed; including responses in patients with cutaneous T-cell lymphoma (one patient), HCL (three patients), chronic lymphocytic leukemia (one patient), Hodgkin's disease (one patient), and adult T-cell leukemia (one patient). Responding patients had 2- to 5-log reductions of circulating malignant cells, improvement in skin lesions, and regression of lymphomatous masses and splenomegaly.

Several improvements on the original immunotoxin have been made (and are also the subject of patents and patent applications). One is the replacement of the single chain Fv with a more stable disulfide stabilized Fv. Another is recombinant immunotoxins that have been modified from a parental immunotoxin to lower liver toxicity. Still another discloses a polyethylene glycol modified form that is less immunogenic and has a longer half life in animals.

BL22, An Immunotoxin That Shows Efficacy in Clinical Trials in Treating Patients With Chemotherapy-Resistant Hairy Cell Leukemia, and Ha22, a Newly Engineered Immunotoxin, Which Shows Improved Cytotoxic Activity Over BL22

A number of patents and patent applications cover this technology, including but not limited to:

''Reduction of the nonspecific animal toxicity of immunotoxins by mutating the framework regions of the Fv to lower the isoelectric point,'' PCT/US01/43602, by Pastan, Onda, Nagata, Tsutsumi, Vincent, Kreitman, Vasmatzis, and Lee. (DHHS Ref. E–146–1999/0);

''Immunotoxin containing a disulfide-stabilized antibody fragment joined to a Pseudomonas Exotoxin that does not require proteolytic activation,'' PCT/US94/06678, by Pastan and Kuan. (DHHS Ref. E–163–1993/0,1);

''Recombinant antibody-toxin fusion protein,'' PCT/US90/02097, U.S. Patents 6,051,405, 5.863,745, and 5,696,237, by Fitzgerald, Foudhary, Pastan, and Waldmann. (DHHS Ref. E–135–1989/0); and

''PEGylation of linkers improves antitumor activity and decreases toxicity of immunoconjugates,'' PCTUS01/18503, by Pastan, Tsutsumi, Onda, Nagata, Lee and Kreitman. (DHHS Ref. E–216–2000/2)

The invention provides recombinant immunotoxins one of which has been used in a clinical trial to treat hematologic malignancies. The antibody portion of the parental immunotoxin is an anti-CD22 RFB4(dsFv) antibody or antigen-binding fragment, and it is fused to truncated Pseudomonas Exotoxin (PE38), creating the BL22 immunotoxin.

BL22 has been used in a phase I clinical trial for CD22 expressing malignancies and a high complete response rate observed in refractory Hairy Cell Leukemia (HCL). Of 16 cladribine-resistant patients, 11 had a complete remission and 2 had a partial remission with BL22 (Kreitman *et al.*, N Engl J Med. 2001 Jul 26;345(4):241–7). Further responses have been observed since this publication and a phase 2 trial in HCL has just opened. Phase 2 trials in CLL and pediatric ALL should open soon.

HA22 is an improved form of BL22 with mutations in the antibody portion that increase its binding affinity for CD22 and its ability to kill cells from patients with low CD22 expression as occurs in CLL.

Several improvements on the original immunotoxin are also disclosed in these patents and patent applications. One of these is an application disclosing recombinant immunotoxins that have been modified from a parental immunotoxin to lower liver toxicity. Another generally discloses several different immunotoxins that might prove useful in treating hematological malignancies. Still another discloses methods of increasing immunotoxin stability by connecting the antibody chains with a disulfide bond.

Dated: March 2, 2004.

Steven M. Ferguson,

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

[FR Doc. 04–5223 Filed 3–8–04; 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.

Carbohydrate-Encapsulated Quantum Dots For Cell-Specific Biological Imaging

Joseph Barchi, Sergey Svarovsky (NCI).

PCT Application No. PCT/US03/34897 filed 05 Nov 2003 (DHHS Reference No. E–325–2003/0–PCT–01).

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

Available for licensing is intellectual property covering carbohydrate-encapsulated quantum dots (QD) for use in medical imaging and methods of making the same. Certain carbohydrates, especially those included on tumor glycoproteins are known to have affinity for certain cell types. One notable glycan used in the present invention is the Thomsen-Freidenreich disaccharide (Galβ1–3GalNAc) that is readily detectable in 90% of all primary human carcinomas and their metastases. These glycans can be exploited for medical imaging. Quantum Dots (QDs) are semiconductor nanocrystals (CdSe or CdTe) with detectable luminescent properties. Encapsulating luminescent QDs with target-specific glycans permits efficient imaging of the tissue to which the glycans bind with high affinity. Accurate imaging of diseased cells (*e.g.*, primary and metastatic tumors) is of primary importance in disease management. The inventors describe the only *stable* synthesis of glycan encapsulated Qds and the Qds per se.

Method and Apparatus for Bioweapon Decontamination

Deborah S. Wilson (ORS).

U.S. Provisional Application filed 16 Jan 2004 (DHHS Reference No. E–218–2003/0–US–01).

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

It is in the interest of the public health and national security that the Public Health Service find a licensee for the commercial development and rapid dissemination of the apparatus and method of this invention.

The apparatus enables the decontamination of articles contaminated with bioweapons, more particularly sporolated bioweapons of which anthrax (*Bacillus anthracis*) is of notable concern. The system includes enclosing the article to be decontaminated in a humidified environment thus enhancing the susceptibility of spores to decontamination gases such as chlorine dioxide. Vacuum sealing the chamber and exposing the contaminated article to decontamination gases kills 100% of the spores.

Methods and Devices for Intramuscular Stimulation in Dysphonia

Christy L. Ludlow, Eric Mann, Theresa Burnett, Steve Bielamowicz (NINDS).

U.S. Provisional Application No. 60/413,733 filed 27 Sep 2002 (DHHS Reference No. E–181–2002/0–US–01); PCT Application No. PCT/US03/30032 filed 27 Sep 2003 (DHHS Reference No. E–181–2002/0–PCT–02).

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

The invention is presently being licensed to two entities for treating dysphagia. The method and device of the invention can also be used for treating dysphonia, and the Public Health Service seeks a licensee to commercially develop this invention for that purpose. Qualified applicants are preferably those having implantable stimulators capable of inducing intramuscular stimulation of the laryngeal musculature to improve voice in humans. This invention will assist those persons who have chronic long-standing dysphonia. The invention comprises three unique components: (1) Intramuscular implantation to produce two synergistic actions; (2) independent long term control of stimulation during speech by patients; and, (3) a unique system of combining indwelling intramuscular electrodes and controllers.

Methods and Compositions To Detect Nucleic Acid

Dougbeh C. Nyan (NIDDK).

U.S. Provisional Application No. 60/468,341 filed 06 May 2003 (DHHS Reference No. E–146–2002/0–US–01).

Licensing Contact: Michael Ambrose; 301/594–6565; *ambrosem@mail.nih.gov.*

This technology involves the isolation and identification of Helicobacter within fecal matter. The technology provides for the methods and nucleic acid primer reagents and sequences specific for H. pylori. Specifically, it addresses the identification of the common human species of H. pylori. H. pylori is a major infectious agent of the human gastric intestinal tract, affecting about 50% of the world population with various degrees of severity. H. pylori infection is associated with 95% of duodenal ulcers and 80% of gastric ulcers. Without treatment, 80% of duodenal ulcers will return. Further, gastric ulcers have been linked as precursors to the more life-threatening gastric cancers.

Current diagnostics are expensive, invasive, or require the patient to ingest radioactive substances. The technology presented provides for a quick, specific, inexpensive, non-invasive method for diagnosis of H. pylori infection as well the ability to repeat such tests for patient follow up on treatment effectiveness. Also included is the ability to develop kits for commercial purposes.

Novel Spore Wall Proteins and Genes From Microsporidia

Russell J. Hayman, John T. Conrad, Theodore Nash (NIAID).

PCT Application No. PCT/US01/47182 filed 04 Dec 2001, which published as WO 03/048299 on 12 Jun 2003 (DHHS Reference No. E–125–2001/0–PCT–02).

Licensing Contact: Michael Ambrose; 301/594–6565; *ambrosem@mail.nih.gov.*

Microsporidia are obligate, intracellular organisms that infect a wide range of hosts, including humans. Disease occurs mostly in immunosuppressed individuals, particularly those with AIDS, but infections have been documented in immunocompetent persons with diarrhea. Effective treatment is available for disease caused by some species. However, the most common type can only be treated with an experimental drug that is not available.

The invention presented here involves the isolation and use of two spore wall proteins of E. intestinalis, spore wall protein 1 (SWP–1) and spore wall protein 2 (SWP–2). These form the wall of the spore and enable the parasite to survive outside the host and therefore enable transmission. Although infection occurs after the spore contents are injected through the cell membrane into the host cell, proximity to the cell and a high likelihood of infection occurs because the spore wall attaches to the cell. Therefore, prevention of binding by antibodies, for instance, is likely to prevent infection. Some spores may also be infectious after being taken up by certain host cells. After infection, multiplication by merogony and sporogony occurs, releasing more infectious spores into the host and/or environment.

The invention claims SWP–1 and SWP–2 as isolate proteins and as immunogenic fragments of these parent proteins. Further claims include the nucleic acids that encode the whole proteins as well as the immunogenic fragments. A second series of claims include the methods and use of these reagents for diagnostic kit development as well as prevention of infectivity using

the proteins as well as nucleic acid constructs of SWP–1 and SWP–2. A third series of claims covers the administration and use of SWP–1 and SWP–2, either as whole proteins, immunogenic fragments or nucleic acid expression constructs along with a pharmaceutically acceptable carrier for the treatment of microsporidiosis. A final set of claims include the administration of certain ligands to SWP–2 in pharmaceutically acceptable carriers for the prevention and treatment of microsporidiosis.

Dated: March 2, 2004.

Steven M. Ferguson,

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

[FR Doc. 04–5224 Filed 3–8–04; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institutes of Health Announcement of Scientific Conference

ACTION: Notice.

UPCOMING CONFERENCE: Carnitine: The Science Behind a Conditionally Essential Nutrient

SUMMARY: The National Institute of Child Health and Human Development, the National Center for Complementary and Alternative Medicine, the National Institute of Mental Health, and the Office of Dietary Supplements are sponsoring a conference, *Carnitine: The Science Behind a Conditionally Essential Nutrient.* The conference will take place on March 25 and 26, 2004 at the Natcher Conference Center on the campus of the National Institutes of Health in Bethesda, Maryland.

This conference will address the following topics related to Carnitine:

- Basic physiology and pharmacology;
- Carnitine replacement in primary and secondary carnitine deficiency syndromes; and
- Carnitine supplementation in exercise, cardiovascular disease, obesity, diabetes, HIV infection, aging, cancer, and infertility.

The overall conference goals are to:

- Provide the scientific and lay communities with the most updated, evidence-based information regarding the role of carnitine in health and disease prevention;
- Clarify issues relevant to appropriate uses of carnitine; and
- Propose new areas of research for future studies in this nutrient.

ACCREDITATIONS: The American College of Nutrition is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The American College of Nutrition designates this continuing medical education activity for 12.5 CME credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

The Certification Board for Nutrition Specialist (CBNS) authorizes 12.5 CNE credits hours for Certified Nutrition Specialists (CNS).

FOR FURTHER INFORMATION CONTACT: The conference Web site at *www.scgcorp.com/carnitine2004/index.htm.*

Dated: March 4, 2004.

Christy Thomsen,

Director, Office of Communications and Public Liaison, National Center for Complementary and Alternative Medicine, National Institutes of Health.

[FR Doc. 04–5297 Filed 3–8–04; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Consensus Development Conference on Celiac Disease; Notice

Notice is hereby given of the National Institutes of Health (NIH) Consensus Development Conference on ''Celiac Disease'' to be held June 28–30, 2004, in the NIH Natcher Conference Center, 45 Center Drive, Bethesda, Maryland 20892. The conference will begin at 8:30 a.m. on June 28 and 29, and at 9 a.m. on June 30, and will be open to the public.

Celiac disease is a disorder primarily affecting the gastrointestinal tract that is characterized by chronic inflammation of the mucosa, which leads to atrophy of intestinal villi, malabsorption, and protean clinical manifestations which may begin either in childhood or adult life. Symptoms can include abdominal cramping, bloating, and distention, and untreated celiac disease may lead to vitamin and mineral deficiencies, osteoporosis and other problems.

At the present time, celiac disease is widely considered to be a rare disease in the United States. However, recent studies, primarily in Europe but also in the United States, suggest that its prevalence is much higher than previous estimates, raising the concern that the disease is widely under-recognized. Recent progress in identification of autoantigens in celiac disease have led to the development of new serological diagnostic tests, but the appropriate use of testing strategies has not been well defined. Some patients with celiac disease may be at risk for non-Hodgkin's lymphoma, a rare cancer affecting the gastrointestinal tract. It is not yet clear, however, what the impact of this observation should be on diagnostic and treatment strategies.

This tow-and-a-half-day conference will examine the current state of knowledge regarding celiac disease and identify directions for future research.

During the first day-and-a-half of the conference, experts will present the latest research findings on celiac disease to an independent panel. After weighing all of the scientific evidence, the panel will draft a statement, addressing the following key questions:

—How is celiac disease diagnosed?
—How prevalent is celiac disease?
—What are the manifestations and long-term consequences of celiac disease?
—Who should be tested for celiac disease?
—What is the management of celiac disease?
—What are the recommendations for future research on celiac disease and related conditions?

On the final day of the conference, the panel chairperson will read the draft statement to the conference audience and invite comments and questions. A press conference will follow, to allow the panel and chairperson to respond to questions from the media.

The primary sponsors of this meeting are the National Institute of Diabetes and Digestive and Kidney Diseases and the NIH Office of Medical Applications of Research.

Advance information about the conference and conference registration materials may be obtained from American Institutes for Research of Silver Spring, Maryland, by calling 888–644–2667, or by sending e-mailing to *celiac@air.org.* American Institutes for Research's mailing address is 10720 Columbia Pike, Silver Spring, MD, 20901. Registration information is also available on the NIH consensus Development Program Web site at *http://consensus.nih.gov.*

Please Note: The NIH has recently instituted new security measures to ensure the safety of NIH employees and property. All visitors must be prepared to show a photo ID upon request. Visitors may be required to pass through a metal detector and have bags, backpacks, or purses inspected or x-rayed as they enter NIH buildings. For