

Confidential Disclosure Agreement will be required to receive copies of the patent applications.

#### **Autoantibody Detection for Cancer Diagnostics**

Yoon Cho-Chung (NCI), US Provisional Application No. 60/551,776 filed 11 Mar 2004 (DHHS Reference No. E-081-2004/0-US-01)

*Licensing Contact:* Brenda Hefti; 301/435-4632; [heftib@mail.nih.gov](mailto:heftib@mail.nih.gov).

The current patent application addresses the need to discover novel biomarkers for the diagnosis, screening and monitoring of tumor progression or regression. The invention relates to compositions and methods for detecting autoantibodies against an extracellular form of protein kinase A (ECPKA) in a biological sample for the diagnosis of cancer. ECPKA is secreted from cancer cells which then elicits the formation of serum autoantibodies which can serve as a cancer diagnostic and prognostic marker. The invention describes a highly sensitive enzyme immunoassay that measures the presence of anti-ECPKA autoantibody in biological samples of cancer patients. The present invention demonstrates that the sera presence of autoantibody directed against ECPKA is highly correlative of cancer. The immunoassay developed for anti-ECPKA antibody is highly sensitive and specific. Use of the immunoassay exhibits markedly high anti-ECPKA antibody titers in cancer patients but low or non-existent titers in normal individual controls. Furthermore, use of the invention to detect anti-ECPKA antibodies is much more sensitive and specific than results from other current assays that detect only antigen activity. The invention demonstrates that the approach of autoantibody analysis, rather than conventional antigen analysis for ECPKA and other cancer antigens, provides a valuable approach for cancer diagnosis. This ECPKA-autoantibody-based immunoassay method provides an important diagnostic procedure applicable for the detection of cancers of various cell types.

#### **Vaccine Peptide Derived from XAGE-1 to Prevent Tumor Growth**

Jay A. Berzofsky, Ira H. Pastan, and Masaki Terabe (NCI), U.S. Provisional Application No. 60/529,025 filed 12 Dec 2003 (DHHS Reference No. E-090-2003/0-US-01)

*Licensing Contact:* Brenda Hefti; 301/435-4632; [heftib@mail.nih.gov](mailto:heftib@mail.nih.gov).

This invention describes a novel peptide derived from the protein XAGE-1 which is expressed specifically in cancer cells of prostate and breast

cancer, as well as Ewing's sarcoma. This peptide is able to bind to human HLA-A2 molecules and to induce specific cytotoxic T lymphocyte response in vivo.

This peptide has therapeutic potential as an immunogen, and might induce cancer specific immune responses in cancer patients, which may cause regression of the cancer or prevent cancer metastasis.

Dated: July 6, 2004.

**Steven M. Ferguson,**

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

[FR Doc. 04-16124 Filed 7-15-04; 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.

#### **Proteomic Toolkit for Protein Identification and Quantitation**

David A. Lucas, Thomas P. Conrads, Timothy D. Veenstra (NCI/SAIC) DHHS Reference No. E-255-2004/0—Research Tool

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

A popular software package for the analysis of raw tandem mass spectrometry proteomic data is

SEQUEST (from ThermoFinnigan, San Jose, CA), which converts raw mass spectral data into peptide identifications (Peptide IDs). The large number of Peptide IDs generated by SEQUEST are contained in a single file and require further analysis using other software to identify relevant peptides. The SEQUEST software, however, cannot combine multiple Peptide ID files nor perform data mining.

The present software developed at the NIH and available for licensing, allows multiple Peptide ID files to be collated into a single file for analysis. Thus, one can analyze and mine the data from multiple proteomic experiments. The software provides tools that are not currently available in the management of mass spectrometry proteomic data. This software can be used to query the data asking relevant questions and provide a statistical component. The NIH software also interfaces directly with SEQUEST.

#### **Software for Determining Features of an Anatomical Boundary Within a Digital Representation of Tissue**

Jianhua Yao and Ronald Summers (NIHCC), U.S. Patent Application No. 10/779,210 filed 13 Feb 2004 (DHHS Reference No. E-351-2003/0-US-01), claiming priority to U.S. Provisional Application No. 60/510,640 filed 10 Oct 2003 (DHHS Reference No. E-174-2003/0-US-01).

*Licensing Contact:* Michael Shmilovich; (301) 435-5019; [shmilovm@mail.nih.gov](mailto:shmilovm@mail.nih.gov). Available for licensing and commercial use and/or distribution is software for analyzing virtual anatomical structures and computing the enclosing three-dimensional boundaries. Various techniques can be used to determine tissue types in the virtual anatomical structure. For example, tissue types can be determined via an iso-boundary between lumen and air in the virtual anatomical structure and a fuzzy clustering approach. Based on the tissue type determination, a deformable model approach can be used to determine an enclosing three-dimensional boundary of a feature in the virtual anatomical structure (e.g., a colonic polyp). The software can be applied in a two-dimensional scenario, in which an enclosing two-dimensional boundary is first determined in a two-dimensional digital representation (for example, a slice of a three-dimensional representation) and then propagated to neighboring slices to result in an enclosing three-dimensional boundary of a feature. The software can also be applied in a three-dimensional scenario, in which an enclosing three-

dimensional boundary of a feature is determined using three-dimensional techniques for tissue classification and converging via a deformable surface to avoid propagation.

### **Abciximab Pharmacodynamic Pattern Recognition**

Mirna Urquidi-MacDonald (Penn State), Darrell Abernethy (NIA), U.S. Patent Application No. 10/810,809 filed 29 Mar 2004 (DHHS Reference No. E-319-2003/0-US-01).

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

Available for licensing and rapid implementation is a computerized neural network for predicting drug dosage and clinical outcome based on the use of data from drug dosage, drug effect and patient clinical characteristics. This network is especially suited to predict dosage and outcome for Abciximab. By establishing associated mapping, the neural network can predict a drug effect for a given patient characteristic and conversely predict drug dosing for a given drug effect and patient characteristic. The associative mapping is established and can be modulated by setting and adjusting weights of the connections between nodes in the neural network. The invention uses a feed-forward back-propagation neural network to model pharmacodynamic behavior and to predict drug dosage.

Dated: July 6, 2004.

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

[FR Doc. 04-16126 Filed 7-15-04; 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 Board of Scientific Advisors.

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 Board of Scientific Advisors.

*Date:* July 12, 2004.

*Time:* 8:30 a.m. to 1 p.m.

*Agenda:* Nanotechnology Initiative, Science Session and Concept Review.

*Place:* Hyatt Regency Bethesda, One Bethesda Metro Center, 7400 Wisconsin Avenue, Bethesda, MD 20814.

*Contact Person:* Paulette S. Gray, PhD, Executive Secretary, Acting Director, Division of Extramural Activities, National Cancer Institute, National Institutes of Health, 6116 Executive Boulevard, 8th Floor, Rm. 8141, Bethesda, MD 20892, 301-496-4218.

This meeting is being published 15 days prior to the meeting due to scheduling conflicts.

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.

Information is also available on the Institute's/Center's home page: [deainfo.nci.nih.gov/advisory/bsa.htm](http://deainfo.nci.nih.gov/advisory/bsa.htm), where an agenda and any additional information for the meeting will be posted when available. (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: July 8, 2004.

**LaVerne Y. Stringfield,**  
*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. 04-16120 Filed 7-15-04; 8:45 am]

**BILLING CODE 4140-01-M**

## **DEPARTMENT OF HEALTH AND HUMAN SERVICES**

### **National Institutes of Health**

#### **National Institute of Diabetes and Digestive and Kidney Diseases; Notice of Closed Meetings**

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 meetings.

The meetings 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 Diabetes and Digestive and Kidney Diseases Special Emphasis Panel; Channels and Kidney Function.

*Date:* July 12, 2004.

*Time:* 9 a.m. to 5 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Bethesda Marriott Suites, 6711 Democracy Boulevard, Bethesda, MD 20817.

*Contact Person:* Michele L. Barnard, PhD, Scientific Review Administrator, Review Branch, DEA, NIDDK, National Institutes of Health, Room 753, 6707 Democracy Boulevard, Bethesda, MD 20892-5452, (301) 594-8898, [barnardm@extra.niddk.nih.gov](mailto:barnardm@extra.niddk.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 of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel, Translational Research for the Prevention and Control of Diabetes.

*Date:* July 23, 2004.

*Time:* 8 a.m. to 5 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Bethesda Marriott Suites, 6711 Democracy Boulevard, Bethesda, MD 20817.

*Contact Person:* Michele L. Barnard, PhD, Scientific Review Administrator, Review Branch, DEA, NIDDK, National Institutes of Health, Room 753, 6707 Democracy Boulevard, Bethesda, MD 20892-5452, (301) 594-8898, [barnardm@extra.niddk.nih.gov](mailto:barnardm@extra.niddk.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 of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel, Primary Biliary Cirrhosis Clinical Trial.

*Date:* July 27, 2004.

*Time:* 3:30 p.m. to 5:30 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, Two Democracy Plaza, 6707 Democracy Boulevard, Bethesda, MD 20892 (Telephone Conference Call).

*Contact Person:* John F. Connaughton, PhD, Scientific Review Administrator, Review Branch, DEA, NIDDK, National Institutes of Health, Room 757, 6707 Democracy Boulevard, Bethesda, MD 20892-5452, (301) 594-7797, [connaughtonj@extra.niddk.nih.gov](mailto:connaughtonj@extra.niddk.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 of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel, Therapy in New Onset Type 1 Diabetes Mellitus.

*Date:* July 29, 2004.

*Time:* 2 p.m. to 3:30 p.m.

*Agenda:* To review and evaluate grant applications.