

**Intellectual Property:** HHS Reference No. E-273-2010/0—U.S. Provisional Patent Application No. 61/522,421 filed 11 Aug 2011.

#### Related Technologies

- HHS Reference No. E-079-2003/0—U.S. Patent 7,643,863 issued 05 Jan 2010; International Patent Application PCT/US2004/22027 filed 08 Jul 2004, which published as WO 2005/012926 on 10 Feb 2005.

- HHS Reference No. E-079-2003/1—U.S. Patent Application 12/114,713 filed 02 May 2008.

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

#### One Step Fluorine-18 Peptide Labeling Strategy of Biological Substrates

**Description of Technology:** A one-step process is now available for licensing that allows direct 18F labeling of any biological substrate that is modified with 4-nitro-3-trifluoromethyl arene. Normally, 18F labeling requires several time-consuming radio synthesis steps using prosthetic groups, resulting in a low labeling yield. Other attempts at one step labeling methods have also shown relatively low yields.

This new process eliminates time-consuming radiosynthesis steps and associated low labeling yields with a single step process that displaces a nitro group in an arene. Relatively low amounts of precursor and short time radiosynthesis times are required compared to direct peptide-labeling. Higher yields by this simplified process improve time and cost efficiencies and may make 18F labeling more amenable for automation.

#### Potential Commercial Applications

- Radiological imaging.
- Radiological diagnosis.
- Radiological therapy.

#### Competitive Advantages

- Significantly shorter reaction and synthesis times.
- Lower amounts of precursor required.
- Relatively high yield of specific activity product.

#### Development Stage

- Early-stage.
- Pre-clinical.
- *In vitro* data available.
- *In vivo* data available (animal).

**Inventors:** Xiaoyuan (Shawn) Chen and Orit J. Weiss (NIBIB).

**Publication:** Jacobson O, *et al.* Rapid and simple one-step F-18 labeling of peptides. *Bioconjug Chem.* 2011 Mar 16;22(3):422-428. [PMID 21338096].

**Intellectual Property:** HHS Reference No. E-238-2010/0—U.S. Provisional Patent Application No. 61/429,671 filed 04 Jan 2011.

**Licensing Contact:** Tedd Fenn; (301) 435-5031; [Tedd.Fenn@NIH.gov](mailto:Tedd.Fenn@NIH.gov).

#### Collaborative Research Opportunity:

The NIBIB is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate or commercialize the technology for One Step Fluorine-18 Peptide Labeling Strategy of Biological Substrates. For collaboration opportunities, please contact Shawn Chen, Ph.D. at [shawn.chen@nih.gov](mailto:shawn.chen@nih.gov).

Dated: December 2, 2011.

**Richard U. Rodriguez,**

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

[FR Doc. 2011-31553 Filed 12-7-11; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Government-Owned Inventions; Licensing and Collaborative Research Opportunity: Chemotoxins for Targeted Treatment of Diseased Cells

**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.

#### FOR FURTHER INFORMATION CONTACT:

Licensing information and copies of the U.S. patents and patent applications listed below may be obtained by contacting Patrick McCue, Ph.D. at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852; *telephone:* (301) 496-7057; *e-mail:* [McCuepat@mail.nih.gov](mailto:McCuepat@mail.nih.gov). A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

Inquiries related to Collaborative Research Opportunities may be directed to Nikki Guyton, Ph.D. at the Technology Transfer Center, National

Cancer Institute, 6120 Executive Boulevard, Suite 450, Rockville, MD 20852; *telephone:* (301) 435-3101; *email:* [darackn@mail.nih.gov](mailto:darackn@mail.nih.gov).

#### SUPPLEMENTARY INFORMATION:

#### Technology

Researchers at the National Institute on Aging (NIA) have developed a straightforward method to elicit immune responses to specific cancers and AIDS by using a chemoattractant-based antigen delivery strategy. The strategy uses formulations composed of chemokines fused to toxic moieties (aka "chemotoxins") to preferentially and specifically eliminate chemokine receptor-expressing cells. The method uses the natural ability of the chemokines to stimulate measurable and improved humoral and immune responses.

- Chemokines can be of viral or microbial (B-Defensin) origin.
- This method can also be used to cause inflammation to specifically target immune cells to increase immunogenicity for malignant tumors using SPANX-B and Laminin tumor antigens.

#### Potential Commercial Applications

- A potential immunotherapeutic antigen for the treatment of several malignancies including lymphoma, breast, lung, and ovarian.
- Use as a monoclonal antibody.
- Antigens, such as SPANX-B and Laminin, can also be used as prognostic and diagnostic agents for the monitoring of disease.

#### Competitive Advantages

- In contrast to recombinant proteins, these small peptides can be more easily manufactured.
- They help to facilitate the activation of cells in a more specific and therapeutically effective way.
- Active immune system will do a better job attacking cancer cells.
- Simple and less invasive.

#### Collaborative Research Opportunity

The National Institute on Aging (NIA) is seeking parties interested in collaborative research to further evaluate or commercialize effective vaccines that target bacterial, viral, or tumor antigens. Any or all of the inventions in this announcement are available for co-development and collaboration.

#### Intellectual Property and Developmental Status

- Viral Chemokine Antigen Fusion Proteins (E-194-2000).
- Patent Status: US Patent No. 6,562,347 issued 13 May 2003.



Developmental Status: Proof of concept and pre-clinical development ongoing.

- Anti-Tumor Immunity Elicited by Defensin Tumor Antigen Fusion Proteins (E-196-2000).

Patent Status: US Patent No. 7,754,676 issued 13 Jul 2010; US Patent No. 7,915,040 issued 29 Mar 2011; US Patent Application No. 13/019,160 filed 01 Feb 2011.

Developmental Status: Clinical Trials Pending.

- Vaccine for the Treatment of Malignancies Expressing Immature Laminin Receptor Protein (OFA-iLRP) (E-271-2006).

Patent Status: US Patent Application No. 11/899,165 filed 03 Sep 2007; US Provisional Application No. 60/841,927 filed 01 Sep 2006.

Developmental Status: Pre-clinical with ongoing clinical tests in patients with NSCLC.

- Tumor Associated Antigen SPANX-B for Cancer Immunotherapy (E-089-2009).

Patent Status: US Provisional Application No. 61/156,435 filed 27 Feb 2009.

Developmental Status: Ongoing In vitro pre-clinical studies on human tumor cells.

## References

1. A Biragyn *et al.* Genetic fusion of chemokines to a self tumor antigen induces protective, T-cell dependent antitumor immunity. *Nat Biotechnol.* 1999 Mar;17(3):253-258. [PMID 10096292]
2. A Biragyn *et al.* Mediators of innate immunity that target immature, but not mature, dendritic cells induce antitumor immunity when genetically fused with nonimmunogenic tumor antigens. *J Immunol.* 2001 Dec 1;167(11):6644-6653. [PMID 11714836]
3. G Almanzar *et al.* Sperm-derived SPANX-B is a clinically relevant tumor antigen that is expressed in human tumors and readily recognized by human CD4+ and CD8+ T cells. *Clin Cancer Res.* 2009 Mar 15;15(6):1954-1963. [PMID 19276289]

For information on the Immunotherapeutics Unit, Laboratory of Molecular Biology and Immunology of the National Institute on Aging (NIA), please visit: [http://www.grc.nia.nih.gov/branches/lmbi/cis\\_itu.htm](http://www.grc.nia.nih.gov/branches/lmbi/cis_itu.htm).

Dated: December 2, 2011.

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

[FR Doc. 2011-31554 Filed 12-7-11; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Institute of Biomedical Imaging and Bioengineering; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), 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 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 Biomedical Imaging and Bioengineering Special Emphasis Panel.

*Date:* January 30-31, 2012.

*Time:* 6 p.m. to 7 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Renaissance Washington, DC Dupont Circle Hotel, 1143 New Hampshire Avenue, NW., Washington, DC 20037.

*Contact Person:* Manana Sukhareva, PhD, Scientific Review Officer, National Institute of Biomedical Imaging and Bioengineering, National Institutes of Health, 6707 Democracy Boulevard, Suite 959, Bethesda, MD 20892, (301) 451-3397, [sukharem@mail.nih.gov](mailto:sukharem@mail.nih.gov).

Dated: December 2, 2011.

**Jennifer Spaeth,**

*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. 2011-31551 Filed 12-7-11; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Prospective Grant of Exclusive License: Use of Agents Targeting Thrombospondin-1 and CD47 To Treat Radiation-Induced Damage and Enhance the Effectiveness of Radiotherapy in Cancer Patients

**AGENCY:** National Institutes of Health, Public Health Service, HHS.

**ACTION:** Notice.

**SUMMARY:** This is a notice, in accordance with 35 U.S.C. 209(c)(1) and 37 CFR

404.7(a)(1)(i), that the National Institutes of Health (NIH), Department of Health and Human Services (HHS), is contemplating the grant of a worldwide exclusive license, to practice the inventions embodied in U.S. Provisional Patent Application No. 60/850,132, filed October 6, 2006, now abandoned (HHS Ref. No. E-227-2006/0-US-01); U.S. Provisional Patent Application No. 60/864,153, filed November 02, 2006, now abandoned (HHS Ref. No. E-227-2006/1-US-01); U.S. Provisional Patent Application No. 60/888,754, filed February 07, 2007, now abandoned (HHS Ref. No. E-227-2006/2-US-01); U.S. Provisional Patent Application No. 60/910,549, filed April 06, 2007, now abandoned (HHS Ref. No. E-227-2006/3-US-01); U.S. Provisional Patent Application No. 60/956,375, filed August 16, 2007, now abandoned (HHS Ref. No. E-227-2006/4-US-01); PCT Patent Application No. PCT/2007/080647, filed October 5, 2007, now abandoned (HHS Ref. No. E-227-2006/5-PCT-01); U.S. Patent Application No. 12/444,364, filed April 3, 2009 (HHS Ref. No. E-227-2006/5-US-02); Canadian Patent Application No. 2,665,287, filed October 5, 2007 (HHS Ref. No. E-227-2006/5-CA-03); Australian Patent Application No. 2007319576, filed October 5, 2007 (HHS Ref. No. E-227-2006/5-AU-04); European Patent Application No. 07868382.8, filed October 5, 2007 (HHS Ref. No. E-227-2006/5-EP-05); U.S. Provisional Patent Application No. 61/086,991, filed August 7, 2008, now abandoned (HHS Ref. No. E-153-2008/0-US-01); PCT Patent Application No. PCT/2009/052902, filed August 5, 2009, now abandoned (HHS Ref. No. E-153-2008/0-PCT-02); U.S. Patent Application No. 13/057,447, filed February 3, 2011 (HHS Ref. No. E-153-2008/0-US-06); Canadian Patent Application No. 2732102 filed August 5, 2009 (HHS Ref. No. E-153-2008/0-CA-043); Australian Patent Application No. 2009279676, filed August 5, 2009 (HHS Ref. No. E-153-2008/0-AU-03); and European Patent Application No. 09791202.6, filed August 5, 2009 (HHS Ref. No. E-153-2008/0-EP-08), entitled "Prevention of Tissue Ischemia, Related Methods and Compositions," and "Radioprotectants Targeting Thrombospondin-1 and CD47," to Radiation Control Technologies, Inc., a company incorporated under the laws of the State of Delaware having its headquarters in Rockville, Maryland. The United States of America is the assignee of the rights of the above inventions. The prospective exclusive license territory may be "worldwide,"