into host cells. More specifically, this multimeric CD4 inhibits the interaction between HIV–1 gp120 and CD4 present on the surface of CD4 T-cells, the major HIV–1 target cell. There is strong evidence that binding between gp120, as part of a virion spike, and CD4 on cell surface is the first step for HIV entry into host cells. This multimeric CD4 provides a number of advantages over inhibitory CD4 molecules previously developed. First, this CD4 multimer is capable of binding at least 10 gp120 simultaneously with high avidity. Second, it does not enhance HIV infection at suboptimal concentrations, a phenomenon observed with previously developed recombinant CD4 molecules. Third, it has been demonstrated that this CD4 fusion protein hyper-crosslinks CD16 on natural killer (NK) cells and as a consequence delivers an exceptionally strong signal to NK cells, promoting potent Antibody-Dependent Cellular Cytotoxicity (ADCC) and lysis of HIV-infected cells. The inventors have shown that this recombinant CD4 multimer efficiently neutralizes primary isolates from different HIV subgroups.

The invention comprises an immunoglobulin construct having up to 12 amino terminal domains of CD4 (D1D2), the epitope responsible for HIV–1 gp120 binding activity. It also comprises domains of a human IgG1 heavy chain, as well as the IgA tailpiece that drives its polymerization. The two amino terminal domains of CD4 are fused to the CH2CH3 domains (which bears the FC receptor recognition epitopes) of a human IgG1 heavy chain.

Applications: HIV therapeutics and HIV vaccine development.

Advantages: Efficient inhibition of HIV–1 viral entry without enhancement of infection at suboptimal concentrations. Potent activation of Antibody-Dependent Cellular Cytotoxicity (ADCC) and lysis of HIV-infected cells.

Development Status: The anti-HIV activity of this multimeric CD4 protein has been well characterized in vitro.

Inventors: James Arthos, Claudia Cicala, Anthony S. Fauci (NIAID).

Publications:

1. J Arthos *et al.* Biochemical and biological characterization of a dodecameric CD4–Ig fusion protein: implications for therapeutic and vaccine strategies. J Biol Chem. 2002 Mar 29;277(13):11456–11464.
2. PD Kwong *et al.* HIV–1 evades antibody-mediated neutralization through conformational masking of receptor-binding sites. Nature. 2002 Dec 12;420(6916):678–682.
3. N Gupta *et al.* Targeted lysis of HIV-infected cells by natural killer cells armed and triggered by a recombinant immunoglobulin fusion protein: implications for immunotherapy. Virology. 2005 Feb 20;332(2):491–497.
4. T Zhou *et al.* Structural definition of a conserved neutralization epitope on HIV–1 gp120. Nature. 2007 Feb 15;445(7129):732–737.
5. A Bennett *et al.* A Cryoelectron tomographic analysis of an HIV-neutralizing protein and its complex with native viral gp120. J Biol Chem. 2007 Sep 21;282(38):27754–27759.

Patent Status: HHS Reference No. E–337–2001/0—

- U.S. Patent No. 7,368,114 issued 06 May 2008
- European Application No. 02799169.4 (recently allowed)

Licensing Status: Available for licensing.

Licensing Contact: RC Tang, JD, LLM; 301–435–5031; *tangrc@mail.nih.gov*.

Collaborative Research Opportunity: The National Institute of Allergy and Infectious Diseases, Laboratory of Immunoregulation, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize this invention. Please contact William Ronnenberg at 301–451–3522 or *wronnenberg@niaid.nih.gov* for more information.

Dated: October 29, 2009.

Richard U. Rodriguez,

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

[FR Doc. E9–26607 Filed 11–3–09; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; 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: Center for Scientific Review Special Emphasis Panel, Member Conflict: Development and Social Psychology.

Date: November 12, 2009.

Time: 10 a.m. to 12 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892. (Telephone Conference Call).

Contact Person: Lee S. Mann, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3186, MSC 7848, Bethesda, MD 20892, 301–435–0677, *mannl@csr.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.

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: October 28, 2009.

Jennifer Spaeth,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. E9–26576 Filed 11–3–09; 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(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of the meeting of the National Cancer Advisory Board.

The meeting will be open to the public as indicated below, 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.

A portion of the meeting will be closed to the public in accordance with the provisions set forth in section 552b(6), as amended. The discussions could disclose personal information concerning NCI Staff and/or its contractors, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.