DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

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 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: AIDS and Related Research Integrated Review Group, AIDS Discovery and Development of Therapeutics Study Section.

Date: March 8, 2016.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: Residence Inn Bethesda, 7335 Wisconsin Avenue, Bethesda, MD 20814.

Contact Person: Shiv A Prasad, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5220, MSC 7852, Bethesda, MD 20892, 301–435–7799, prasadscs@nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Infectious Diseases and Microbiology.

Date: March 8, 2016.

Time: 9:30 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Guangyong Ji, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3211, MSC 7808, Bethesda, MD 20892, 301–435–1146, jig@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, AREA application in Infectious Diseases and Microbiology.

Date: March 8, 2016.

Time: 9:30 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Liangbiao Zheng, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3202, MSC 7808, Bethesda, MD 20892, 301–996–5819, zhengl@csr.nih.gov.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The invention listed below is owned by an agency of the U.S. Government and is available for licensing and/or co-development in the U.S. in accordance with 35 U.S.C. 209 and 37 CFR part 404 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 and/or co-development.

ADDRESS: Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail Stop 9702, Rockville, MD 20850–9702.

FOR FURTHER INFORMATION CONTACT: Information on licensing and co-development research collaborations, and copies of the U.S. patent applications listed below may be obtained by contacting: Attn. Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail Stop 9702, Rockville, MD 20850–9702, Tel. 240–276–5515 or email nctechtransfer@mail.nih.gov. A signed Confidential Disclosure Agreement may be required to receive copies of the patent applications.

SUPPLEMENTARY INFORMATION: Technology description follows.

Title of Invention

AAV-based Vectors for the Therapeutic Management of Menkes Disease and Related Copper Transport Disorders

Description of Technology

The only currently available treatment for Menkes disease, subcutaneous copper histidinate injections, is successful only in patients with ATP7A gene mutations that do not completely corrupt ATP7A copper transport function (estimated 20–25% of affected patients) and when started at a very early age (first month of life). The combination of viral gene therapy with copper injections provides working copies of the ATP7A copper transporter into the brain, together with a source of the substrate (copper) needed for proper brain growth and clinical neurodevelopment.

Codon-optimized nucleic acids encoding a reduced-size ATP7A protein and compositions of AAV vectors were discovered by NICHD researchers along with methods of administering this therapy. Human P-type ATPase copper-transporting ATPase 1 (ATP7A) transports copper from enterocytes (where it is taken up from dietary copper) into the blood. ATP7A also mediates passage of copper across the blood-cerebrospinal fluid (CSF) barrier and the blood-brain barrier. In Menkes disease and occipital horn syndrome (OHS), copper accumulates in intestinal cells and less copper is absorbed into the blood, resulting in restricted copper supply to other tissues, particularly the brain. Death in infancy or early childhood is a common consequence.

Therapeutic delivery of the copper transport protein via an AAV vector, combined with subcutaneous copper histidinate treatment will relieve the copper deficiency to the brain and permit normal neurological development and function.

Potential Commercial Applications

• Treatment of Menkes Disease, Occipital Horn Syndrome, and of ATP7A-related distal motor neuropathy

Value Proposition

• Provides working copies of the ATP7A copper transporter into the brain, together with a source of the substrate (copper) needed for proper brain growth and clinical neurodevelopment.

Development Stage

Pre-clinical (in vivo validation)

Inventor(s)

Stephen G. Kaler, M.D. (NICHD)

Intellectual Property

HHS Reference No. E–062–2015/0
U.S. Provisional Application No. 62/244,594 filed 21 October 2015
DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The invention listed below is owned by an agency of the U.S. Government and is available for licensing and/or co-development in the U.S. in accordance with 35 U.S.C. 209 and 37 CFR part 404 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 and/or co-development.

ADDRESSES: Information on licensing, co-development research collaborations, and/or copies of the U.S. patent applications listed below may be obtained by contacting: Attn. Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail Stop 9702, Rockville, MD, 20850–9702, Tel. 240–276–5515 or email ncitechtransfer@mail.nih.gov. A signed Confidential Disclosure Agreement may be required to receive copies of the patent applications.

FOR FURTHER INFORMATION CONTACT: Requests for copies of the patent application or inquiries about licensing and/or co-development should be sent to John D. Hewes, Ph.D., email: john.hewes@nih.gov.

SUPPLEMENTARY INFORMATION: Technology description follows.

Title of invention: Modified griffithsin tandemers for enhanced activity and reduced viral aggregation.

Description of Technology: Griffithsin (GRFT) is a lectin with potent antiviral properties that is capable of preventing and treating infections caused by a number of enveloped viruses (including HIV, SARS, HCV, HSV, and Japanese encephalitis) and is currently in clinical development as an anti-HIV microbicide. In addition to its broad antiviral activity, GRFT is stable at high temperature and at a broad pH range, displays low toxicity and immunogenicity, and is amenable to large-scale manufacturing. Native GRFT is a domain-swapped homodimer that binds to viral envelope glycoproteins and has displayed mid-picomolar activity in cell-based anti-HIV assays. This invention is directed to synthetic proteins that comprise two (or more) obligate monomers (“mGRFT”) joined by an amino acid linker to form tandemers (“mGRFT tandemers”). Each obligate monomer is generated by the addition of Gly-Ser residues in the hinge region of wild-type GRFT. Two or more obligate monomers are joined by an amino acid linker to form the mGRFT tandemers. The properties of the mGRFT tandemers can be modulated by the length of the amino acid linker and the number of obligate monomers co-joined. mGRFT tandemers exhibit potent anti-viral properties when compared against native GRFT and are equipotent against viruses that are both sensitive and resistant to naive GRFT. As such, potential uses of the invention tandemers include topical and intravenous therapy to treat HIV infection, particularly to treat HIV infections that are resistant to native GRFT.

Potential Commercial Applications:

• Broad-spectrum antiviral agent similar to wild type GRFT
• Potential activity against SARS CoV, MERS, Ebola, HCV and influenza

Value Proposition:

• Broad antiviral activity
• Stable at high temperature and at a broad pH range
• Displays low toxicity and immunogenicity.

Development Stage: In vivo/Lead Validation.

Inventor(s): Barry R. O’Keefe (NCI), A. Wlodawer (NCI), T. Moulaei (NCI).

Publication(s):


—A. Chatterjee et al., Griffithsin and Cagareenian Combination To Target Herpes Simplex Virus 2 and Human Papillomavirus, Antimicrob Agents Chemother. 2015 Dec; 59(12): 7290–7298.

Intellectual Property


Licensing and Collaborative/Co-Development Research Opportunity: Researchers at the NCI seek licensees and/or co-development partners for the commercialization of Griffithsin and Griffithsin tandemers, specifically, additional studies on stability, toxicity, immunogenicity, and large-scale production.

Dated: February 1, 2016.

John D. Hewes,
Technology Transfer Specialist, Technology Transfer Center, National Cancer Institute.