

conserved among closely related bacterial species, including *Salmonella* and *Klebsiella*, presenting a unique opportunity to develop both specific and broad-based antibiotic therapeutics. The invention contemplates a number of uses for the sRNAs, including, but not limited to, inhibition by antisense, manipulation of gene expression, and possible vaccine candidates.

Peptides that Stabilize Protein Antigens and Enhance Presentation to CD8+ T Cells

Roger Kurlander, Elizabeth Chao, Janet Fields (CC)

DHHS Reference No. E-172-99/1 filed 12 Dec 2000 (PCT/US00/33027, published as WO 01/40275), with priority to 06 Dec 1999

This invention relates to compositions and methods for stabilizing an antigen against proteolytic degradation and enhancing its presentation to CD8+ cells. The invention claims "fusion agents," isolated molecules comprising a hydrophobic peptide joined to an epitope to which a CD8+ T cell response is desired. Also claimed in the invention are the nucleic acid sequences that encode the fusion agents. Recently, there has been great interest in developing vaccines to induce protective CD8+ T cell responses, however, there are practical obstacles to this goal. Although purified antigenic peptides are effectively presented in vitro, introduced in a purified form they often do not stimulate effective T cell responses in vivo because the antigens are insufficiently immunogenic and too easily degraded. Adjuvants or infectious "carriers" often can enhance these immune responses, however, these added agents can cause unacceptable local or systemic side effects. The present invention increases antigen stability and promotes in vivo responses in the absence of an adjuvant or active infection.

The invention describes three variants of *lemA*, an antigen recognized by CD8+ cells in mice infected with *Listeria monocytogenes*. The antigenic and stabilizing properties of *lemA* can be accounted for by the covalent association of the immunogenic aminoterminal hexapeptide with the protease resistant scaffolding provided by amino acids 7 to 33 of the *lemA* sequence (*lemA*(7-33)). Variants t-*lemA*, and s-*lemA* bearing an antigenic sequence immediately preceding *lemA*(7-33), and *lemS* containing an immunogenic sequence immediately after *lemA*(7-33), each induce a CD8+ T cell response and protect the crucial immunogenic oligopeptide from protease degradation. The site of antigen

insertion relative to *lemA*(7-33) can influence antigen processing by preferentially promoting processing either in the cytoplasm or endosomal compartment. Therefore, several embodiments of the invention involve the construction of antigen processing protein molecules and their methods of use. Alternatively, a DNA sequence coding *lemA*(7-33) may be inserted at an appropriate site to enhance the immunogenicity of the antigenic element coded by a DNA vaccine. In sum, this invention is an attractive, nontoxic alternative to protein/adjuvant combinations in eliciting CD8 responses in vivo and a useful element for enhancing the efficiency with which products coded by DNA vaccines are processed and presented in vivo. Because *lemA*(7-33) is particularly effective in protecting oligopeptides from proteases, this invention may have particular usefulness in enhancing local T cell at sites such as mucosal surfaces where there may be high proteolytic activity.

For more specific information about the invention or to request a copy of the patent application, please contact Peter Soukas at the telephone number or e-mail listed above. Additionally, please see a related article published in the *Journal of Immunology* at: 1999;163:6741-6747.

Vibrio cholerae O139 Conjugate Vaccines

Shousun Szu, Zuzana Kossaczka, John Robbins (NICHD)

DHHS Reference No. E-274-00/0 filed 01 Sep 2000 (PCT/US00/24119)

Cholera remains an important public health problem. Epidemic cholera is caused by two *Vibrio cholerae* serotypes O1 and O139. The disease is spread through contaminated water. According to information reported to the World Health Organization in 1999, nearly 8,500 people died and another 223,000 were sickened with cholera worldwide. This invention is a polysaccharide-protein conjugate vaccine to prevent and treat infection by *Vibrio cholerae* O139 comprising the capsular polysaccharide (CPS) of *V. cholerae* O139 conjugated through a dicarboxylic acid dihydrazide linker to a mutant diphtheria toxin carrier. In addition to the conjugation methods, also claimed in the invention are methods of immunization against *V. cholerae* O139 using the conjugates of the invention. The inventors have shown that the conjugates of the invention elicited in mice high levels of serum antibodies to CPS, a surface antigen of *Vibrio cholerae* O139, that have vibriocidal activity. Clinical trials of the two most

immunogenic conjugates have been planned by the inventors. This invention is further described in *Infection and Immunity* 68(9), 5037-5043, Sept. 2000.

Dated: December 19, 2001.

Jack Spiegel,

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

[FR Doc. 01-32170 Filed 12-31-01; 8:45 am]

BILLING CODE 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Arthritis and Musculoskeletal and Skin 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 552(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 Arthritis and Musculoskeletal and Skin Diseases Special Emphasis Panel.

Date: December 21, 2001.

Time: 8:30 am to 3:00 pm.

Agenda: To review and evaluate grant applications.

Place: Natcher Building, 45 Center Drive, Conference Rooms E1/E2, Bethesda, MD 20892. (Telephone Conference Call)

Contact Person: Tracy A. Shahan, PhD, Scientific Review Administrator, National Institute of Arthritis and Musculoskeletal and Skin Diseases, Natcher Building, MSC 6500, 45 Center Drive, 5AS-25H, Bethesda, MD 20892, (301) 594-4952.

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 Arthritis and Musculoskeletal and Skin Diseases Special Emphasis Panel.

Date: December 21, 2001.

Time: 3:30 pm to 4:30 pm.

Agenda: To review and evaluate grant applications.

Place: Natcher Building, 45 Center Drive, Conference Rooms E1/E2, Bethesda, MD 20892. (Telephone Conference Call)

Contact Person: Tracy A. Shahan, PhD, Scientific Review Administrator, National Institute of Arthritis and Musculoskeletal and Skin Diseases, Natcher Building, MSC 6500, 45 Center Drive, 5AS-25H, Bethesda, MD 20892, (301) 594-4952.

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. 93.846, Arthritis, Musculoskeletal and Skin Diseases Research, National Institutes of Health, HHS)

Dated: December 20, 2001.

LaVerne Y. Stringfield,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. 01-32160 Filed 12-31-01; 8:45 am]

BILLING CODE 4140-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Arthritis and Musculoskeletal and Skin Diseases; Notice of Closed 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 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 Arthritis and Musculoskeletal and Skin Diseases Special Emphasis Panel.

Date: January 15-16, 2002.

Time: 1 p.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: Chevy Chase Holiday Inn, Chevy Chase, MD 20815.

Contact Person: Aftab A. Ansari, PhD., Scientific Review Administrator, National Institute of Arthritis and Musculoskeletal and Skin Diseases, Natcher Building, MSC 6500, 45 Center Drive, 5AS-25S, Bethesda, MD 20892, (301) 594-4952.

(Catalogue of Federal Domestic Assistance Program Nos. 93.846, Arthritis, Musculoskeletal and Skin Diseases Research, National Institutes of Health, HHS)

Dated: December 20, 2001.

LaVerne Y. Stringfield,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. 01-32161 Filed 12-31-01; 8:45 am]

BILLING CODE 4140-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Mental Health; Notice of Closed 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 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 contract proposals and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the contract proposals, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of Mental Health Special Emphasis Panel.

Date: January 14, 2002.

Time: 1:30 am to 3:30 pm.

Agenda: To review and evaluate contract proposals.

Place: Neuroscience Center, National Institutes of Health, 6001 Executive Blvd., Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: David I Sommers, PhD, Scientific Review Administrator, Division of Extramural Activities, National Institute of Mental Health, NIH, Neuroscience Center, 6001 Executive Blvd., Room 6144, MSC 9606, Bethesda, MD 20892-9606, 301-443-6470, dsommers@mail.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. 93.242, Mental Health Research Grants; 93.281, Scientist Development Award, Scientist Development Award for Clinicians, and Research Scientist Award; 93.282, Mental Health National Research Service Awards for Research Training, National Institutes of Health, HHS)

Dated: December 20, 2001.

LaVerne Y. Stringfield,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. 01-32162 Filed 12-31-01; 8:45 am]

BILLING CODE 4140-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Mental Health; 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 a meeting of the National Advisory Mental Health Council.

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 accommodation, should notify the Contact Person listed below in advance of the 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 Advisory Mental Health Council.

Date: January 24-25, 2002.

Closed: January 24, 2002, 10:30 am to recess.

Agenda: To review and evaluate grant applications.

Place: Neuroscience Center, National Institutes of Health, 6001 Executive Blvd., Bethesda, MD 20892.

Open: January 25, 2002, 8 am to adjournment.

Agenda: Presentation of NIMH Acting Director's report and discussion of NIMH program, and policy issues.

Place: National Institutes of Health, 9000 Rockville Pike, Conference Room 10, Building 31C, Bethesda, MD 20892.

Contact Person: Jane A. Steinberg, PhD., Director, Division of Extramural Activities, National Institute of Mental Health, NIH, Neuroscience Center, 6001 Executive Blvd., Room 6154, MSC 9609, Bethesda, MD 20892-9609, 301-443-5047.

Any member of the public interested in presenting oral comments to the committee may notify the Contact Person listed on this notice at least 10 days in advance of the meeting. Interested individuals and representatives of organizations may submit a letter of intent, a brief description of the organization represented, and a short description of the oral presentation. Only one representative of an organization may be allowed to present oral comments and if accepted by the committee, presentations may be limited to five minutes. Both printed