## Monoclonal Antibodies Specific and Inhibitory to Human Cytochrome P450 2C8, 2C9, 2C18 And 2C19—New Avenues for Drug Discovery

- Harry V. Gelboin, Frank J. Gonzalez, Kristopher W. Krausz, (NCI),
- DHHS Reference No. E-077-99/0 filed 12 Feb 99

Licensing Contract: Dennis Penn; 301/ 496–7056 ext. 211; e-mail: dp144q@nih.gov

The cytochrome P450 family of enzymes has primary responsibility for the metabolism of xenobiotic drugs and non-drug carcinogens and environmental chemicals, as well as some endobiotics. This laboratory has isolated monoclonal antibodies (MAbs) that are specific to and inhibit the ten major human cytochrome P450s (CYPs) that are responsible for the metabolism of most drugs. The MAb based analytic system identifies the P450s responsible for metabolism of a drug and is thus an entirely new system for Drug Discovery. Drug-drug toxicity can be due to drug partners competing for an individual P450 and be a cause of drug toxicity. Certain drugs given to genetically polymorphic individuals that are defective in a specific P450 can cause serious toxicity to the defective individual. In one case 6-10% of the world population are missing an important P450 (2D6).

The 2C family of cytochrome P450s metabolizes a very large and extensive number of drugs which include tolbutamide, S-Warfarin, mephenytoin, diazepam and taxol. The invention reports the production of inhibitory MAbs to the P450 2C family. The invention describes MAb 5-1-5 and 281-1-1 that specifically inhibit CYP 2C8. MAb 292-2-3 that specifically inhibit CYP 2C9 and MAb 592-2-5 that specifically inhibit both CYP 2C9 and 2C18. MAb 5-7-5 specifically inhibits CYP 2C9, 2C18, and 2C19. In addition MAb 1-68-11 previously reported specifically inhibits all four members of the 2C family, 2C8, 2C9, 2C18, and 2C19. The MAbs may be used as diagnostic probes identifying the single or several P450s responsible for a drugs metabolism and also yield important information on inter-individual differences. The MAb system identifies and characterizes the P450 based metabolism of drugs currently in use and drugs in the screening and development stages of Drug Discovery.

Dated: July 13, 1999. Jack Spiegel, Ph.D. Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health. [FR Doc. 99–18374 Filed 7–16–99; 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. ACTION: Notice.

**SUMMARY:** The invention listed below is owned by an agency of the US Government and is available for licensing in the US 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 a copy of the U.S. patent application listed below may be obtained by contacting Susan S. Rucker, J.D., at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852–3804; telephone: 301/ 496–7056 ext. 245; fax: 301/402–0220; e-mail:sr156v@nih.gov. A signed Confidential Disclosure Agreement will be required to receive a copy of the patent application.

## Immunoadhesins and Methods of Production Thereof

KG Csaky, E Anglade, DM Sullivan (all of NEI), WJ Larochelle (NCI) Serial No. 08/814,567 filed 10 Mar 97

This patent application relates to the field of immunoadhesins. Immunoadhesins, also known as immunoligands, Ig- or Fc- fusion proteins or chimeras are chimeric molecules comprised of a nonimmunoglobulin binding region (e.g., cell surface receptor, ligand, cell adhesion molecule) and an antibody constant domain. Such molecules can be used to identify receptors or ligands, in structure-function studies or as therapeutic agents.

In particular, the application describes a method for producing immunoadhesins which utilizes a replication-deficient adenoviral expression system. This system addresses some of the defects of other immunoadhesion production systems utilizing transfection of plasmid DNA in either a transient or stable system by providing efficient, high level gene expression, appropriate assembly/posttranslation modification and ease of purification. Particular immunoadhesins which have been produced using this system are incorporate IL–10, IL–2, IL–13, IL2ra, IL–1ra, mutant IL–4, ICAM, TGF–1 $\beta$ 1, or TGF- $\beta$ 1<sup>223,225</sup> as the nonimmunoglobulin portion.

This research has been published, in part, in Anglade, et al. "Interleukin-10 immunoadhesin production by a replication-defective adenovirus" J. Immunol. Methods 202(1): 41–8 (March 10, 1997).

Dated: July 13, 1999.

## Jack Spiegel, Ph.D.,

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

[FR Doc. 99–18375 Filed 7–16–99; 8:45 am] BILLING CODE 4140–01–M

# DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### National Institutes of Health

## National Cancer Institute; 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 Cancer Institute Review Group; Subcommittee A— Cancer Centers.

Date: August 5-6, 1999.

*Time:* 7:00 PM to 1:00 PM.

*Agenda:* to review and evaluate grant applications.

*Place:* Embassy Suites, Chevy Chase Pavilion, 4300 Military Rd., Wisconsin at Western Ave., Washington, DC 20015.

*Contact:* David E. Maslow, PHD, Scientific Review Administrator, Grants Review Branch, Division of Extramural Activities, National Cancer Institute, National Institutes of Health, 6130 Executive Boulevard—EPN 643A, Bethesda, MD 20892-7405, 301/496-2330.

(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, 1999.

LaVerne Y. Stringfield,

Committee Management Officer, NIH. [FR Doc. 99–18275 Filed 7–16–99; 8:45 am] BILLING CODE 4140–01–M

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### National Institutes of Health

#### National Human Genome Research Institute; Amended Notice of Meeting

Notice is hereby given of a change in the meeting of the National Human Genome Research Institute Special Emphasis Panel, July 22, 1999, 8:30 AM to July 23, 1999, 6 PM, Hyatt Regency, One Metro Center, Bethesda, MD, 20814 which was published in the **Federal Register** on July 1, 1999, 64 FR 35673.

The meeting will be held in its entirety on July 23 instead of July 22– 23. The meeting is closed to the public.

Dated: July 9, 1999.

#### LaVerne Y. Stringfield,

*Committee Management Officer, NIH.* [FR Doc. 99–18270 Filed 7–16–99; 8:45 am] BILLING CODE 4140–01–M

#### DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### National Institutes of Health

## National Institute of Neurological Disorders and Stroke; 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 Neurological Disorders and Stroke Special Emphasis Panel.

Date: August 4, 1999.

*Time:* 8:30 am to 5:30 pm.

Agenda: To review and evaluate grant applications.

*Place:* Embassy Suites, 4300 Military Road, NW, Chevy Chase, MD 20015.

*Contact Person:* Katherine Woodbury, PHD, Scientific Review Administrator, Scientific Review Branch, NINDS/NIH/ DHHS, Neuroscience Center, 6001 Executive Blvd, Suite 3208, MSC 9529, Bethesda, MD 20892–9529, 301–496–9223.

(Catalogue of Federal Domestic Assistance Program Nos. 93.853, Clinical Research Related to Neurological Disorders; 93.854, Biological Basis Research in the Neurosciences, National Institutes of Health, HHS)

Dated: July 9, 1999.

#### LaVerne Y. Stringfield,

Committee Management Officer, NIH. [FR Doc. 99–18269 Filed 7–16–99; 8:45 am] BILLING CODE 4140–01–M

#### DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### National Institutes of Health

## National Institute of Allergy and Infectious 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 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 Allergy and Infectious Diseases Special Emphasis Panel Clinical Trials and Clinical Markers for Immunologic Diseases.

Date: July 29-30, 1999.

Time: 2 PM to 5 PM.

*Agenda:* To review and evaluate contract proposals.

*Place:* Holiday Inn Bethesda, Versailles Room 4, 8120 Wisconsin Avenue, Bethesda, MD 20814.

*Contact Person:* Madelon C. Halula, Acting Scientific Review Administrator, Scientific Review Program, Division of Extramural Activities, NIAID, NIH, Room 2220, 6700–B Rockledge Drive, MSC 7610, Bethesda, MD 20892–7610, (301) 496–2550, mh30x@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. 93.855, Allergy, Immunology, and Transplantation Research; 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health, HHS) Dated: July 12, 1999.

## LaVerne Y. Stringfield,

Director, Office of Federal Advisory Committee Policy, NIH. [FR Doc. 99–18271 Filed 7–16–99; 8:45 am] BILLING CODE 4140–01–M

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### National Institutes of Health

## National Institute of Allergy and Infectious 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