

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:* National Institute of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel; Cell Replacement Technology for Type 1 Diabetes (SBIR).

*Date:* October 4, 2016.

*Time:* 12:00 p.m. to 4:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, Two Democracy Plaza, 6707 Democracy Boulevard, Bethesda, MD 20892 (Telephone Conference Call).

*Contact Person:* Thomas A. Tatham, Ph.D., Scientific Review Officer, Review Branch, DEA, NIDDK, National Institutes of Health, Room 7021, 6707 Democracy Boulevard, Bethesda, MD 20892-5452, (301) 594-3993, [tatham@mail.nih.gov](mailto:tatham@mail.nih.gov).

*Name of Committee:* National Institute of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel; NIDDK Ancillary Studies (R01).

*Date:* October 27, 2016.

*Time:* 11:00 a.m. to 12:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, Two Democracy Plaza, 6707 Democracy Boulevard, Bethesda, MD 20892 (Telephone Conference Call).

*Contact Person:* Jason D. Hoffert, Ph.D., Scientific Review Officer, Review Branch, DEA, NIDDK, National Institutes of Health, Room 7343, 6707 Democracy Boulevard, Bethesda, MD 20817, 301-496-9010, [hoffertj@nidk.nih.gov](mailto:hoffertj@nidk.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.847, Diabetes, Endocrinology and Metabolic Research; 93.848, Digestive Diseases and Nutrition Research; 93.849, Kidney Diseases, Urology and Hematology Research, National Institutes of Health, HHS)

Dated: September 7, 2016.

**David Clary,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2016-21895 Filed 9-12-16; 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, 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:** 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 [ncitechtransfer@mail.nih.gov](mailto:ncitechtransfer@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:* Analogues of Withanolide E Sensitize Cancer Cells to Apoptosis.

*Keywords:* TRAIL, TLR3, apoptosis, immunotherapy, tumor necrosis factor, TNF.

*Description of Technology:* The tumor necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL) protein has been a target of interest in cancer therapy because it plays a large role in inducing cell apoptosis in cancer cells but not in normal cells. Although TRAIL has been reported to successfully target certain tumor cells which are resistant to traditional chemotherapy or radiation, TRAIL resistance has also been widely observed. Similarly, Toll-like receptor (TLR) 3 ligands such as poly I:C have also been reported to promote apoptosis in certain cancer cells, though the apoptotic signaling in

most cancer cells was weak and was only significant following longer term incubations. Thus, there is a need to develop compounds that can sensitize cancer cells to apoptosis inducing ligands, such as poly I:C and TRAIL.

In collaboration with the University of Arizona, NCI investigators have discovered a series of compounds in the withanolide family that synergistically enhance the response of cancer cells to treatment with an apoptosis-inducing ligand. The compounds each show a 4- to 10-fold increase in potency compared to withanolide E alone in promoting death ligand-mediated cancer cell death. One biotinylated analogue in particular is at least 15-fold more potent than withanolide E in promoting apoptosis in human melanoma cells when used in combination with either poly I:C or TRAIL. A selection of active compounds were tested in murine xenograft models of human melanoma and showed decreased tumor growth and tumor regression.

**Potential Commercial Applications**

- Potential therapeutic for the treatment of cancer either alone or in combination with an apoptosis inducing agent such as TRAIL receptor or TLR 3 agonists by directly promoting tumor cell apoptosis.
- Possible indirect enhancement of cancer immunotherapy due to release of cancer cell antigens in the presence of the powerful immune-adjutant effects of TLR3 agonists.

**Value Proposition**

- Withanolide E derivatives enhance the anti-cancer activity of known apoptosis inducing ligands such as TRAIL or poly I:C and may be used to enhance efficacy of TRAIL receptor or poly I:C agonists that are currently under development.

*Development Stage:* Pre-clinical (in vivo validation).

*Inventor(s):* Thomas Sayers (NCI), Alan Brooks (NCI), Curtis Henrich (NCI), Poonam Tewary (NCI), James McMahon (NCI), Leslie Gunatilaka (University of Arizona), Ya-ming Xu (University of Arizona), and E.M. Kithsiri Wijeratne (University of Arizona).

*Intellectual Property:* US Provisional Application No. 62/292,974, entitled "Method of Sensitizing Cancer Cells to The Cytotoxic Effects of Apoptosis Inducing Ligands in Cancer Treatment," filed February 9, 2016.

**Publications**

1. Tewary P., Gunatilaka A.A. and Sayers T.J. (2016) Using natural products to promote caspase-8-

dependent cancer cell death. Cancer Immunol Immunother. doi:10.1007/s00262-016-1855-0.

*Related Technologies:* US Patent 9,238,069 (HHS Ref. No. E-050-2010) entitled "Use of withanolides to sensitize cancer cells to the cytotoxic effects of Apo2L/TRAIL" issued January 19, 2016.

*Collaboration Opportunity:* Researchers at the NCI seek licensing and/or co-development research collaborations for development of withanolide E analogues for the treatment of cancer.

*Contact Information:* Requests for copies of the patent application or inquiries about licensing, research collaborations, and co-development opportunities should be sent to John D. Hewes, Ph.D., email: [john.hewes@nih.gov](mailto:john.hewes@nih.gov).

Dated: September 6, 2016.

**John D. Hewes,**

*Technology Transfer Specialist, Technology Transfer Center, National Cancer Institute.*

[FR Doc. 2016-21904 Filed 9-12-16; 8:45 am]

**BILLING CODE 4140-01-P**

## 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. 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 Mental Health Initial Review Group; Mental Health Services Research Committee.

*Date:* October 7, 2016.

*Time:* 8:00 a.m. to 2:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Hotel Monaco, 700 F Street NW., Washington, DC 20001.

*Contact Person:* Aileen Schulte, Ph.D., Scientific Review Officer, Division of Extramural Activities, National Institute of Mental Health, NIH, Neuroscience Center, 6001 Executive Blvd., Room 6136, MSC 9606,

Bethesda, MD 20852, 301-443-1225, [aschulte@mail.nih.gov](mailto:aschulte@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program No. 93.242, Mental Health Research Grants, National Institutes of Health, HHS)

Dated: September 7, 2016.

**Carolyn A. Baum,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2016-21897 Filed 9-12-16; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Institute of Environmental Health Sciences; 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:* National Institute of Environmental Health Sciences Special Emphasis Panel; Superfund Hazardous Substance Research and Training Program.

*Date:* September 27-29, 2016.

*Time:* 8:30 a.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Sheraton Imperial Hotel and Convention Center, 4700 Emperor Blvd., Durham, NC 27703.

*Contact Person:* Linda K. Bass, Ph.D., Scientific Review Officer, Scientific Review Branch, Division of Extramural Research and Training, Nat. Institute Environmental Health Sciences, 530 Davis Drive, Room 3074, P.O. Box 12233, MD EC-30, Research Triangle Park, NC 27709, (919) 541-1307, [bass@niehs.nih.gov](mailto:bass@niehs.nih.gov).

*Name of Committee:* National Institute of Environmental Health Sciences Special Emphasis Panel; Superfund Hazardous Substance Research and Training Program.

*Date:* September 29, 2016.

*Time:* 1:30 p.m. to 4:30 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Sheraton Imperial Center, One Europa Drive, Chapel Hill, NC 27517.

*Contact Person:* Leroy Worth, Ph.D., Scientific Review Officer, Scientific Review Branch, Division of Extramural Research and Training, Nat. Institute of Environmental

Health Sciences, 530 Davis Drive, Room 3171, P.O. Box 12233, MD EC-30, Research Triangle Park, NC 27709, (919) 541-0670, [worth@niehs.nih.gov](mailto:worth@niehs.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.115, Biometry and Risk Estimation—Health Risks from Environmental Exposures; 93.142, NIEHS Hazardous Waste Worker Health and Safety Training; 93.143, NIEHS Superfund Hazardous Substances—Basic Research and Education; 93.894, Resources and Manpower Development in the Environmental Health Sciences; 93.113, Biological Response to Environmental Health Hazards; 93.114, Applied Toxicological Research and Testing, National Institutes of Health, HHS)

Dated: September 7, 2016.

**Carolyn Baum,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2016-21896 Filed 9-12-16; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Eunice Kennedy Shriver National Institute of Child Health & Human Development; 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 Child Health and Human Development Initial Review Group; Health, Behavior, and Context Subcommittee.

*Date:* October 14, 2016.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Embassy Suites at the Chevy Chase Pavilion, 4300 Military Road NW., Washington, DC 20015.

*Contact Person:* Priscah Mujuru, DRPH, MPH, Scientific Review Officer, Scientific Review Branch, Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH, 6710B Bethesda Drive, 2221A, Bethesda, MD 20892, 301-435-6908, [mujurup@mail.nih.gov](mailto:mujurup@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.864, Population Research;