

ESTIMATED ANNUALIZED BURDEN HOURS—Continued

Form name	Type of respondent	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total annual burden hours
Paper/pen, CAWI or CATI .....	Spouses .....	10,201	1	25/60	4,250
Paper/pen, CAWI or CATI .....	Proxy .....	635	1	15/60	159

Dated: July 10, 2013.  
**Rick Woychik,**  
*Deputy Director, NIEHS.*  
 [FR Doc. 2013-17362 Filed 7-18-13; 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 inventions listed below are owned by an agency of the U.S. Government and are available for licensing 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.

**FOR FURTHER INFORMATION CONTACT:** Licensing information and copies of the U.S. patent applications listed below may be obtained by writing to the indicated licensing contact at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852-3804; telephone: 301-496-7057; fax: 301-402-0220. A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

**Use of Cysteamine to Treat Metastatic Cancer**

*Description of Technology:* Cysteamine is an aminothioliol and antioxidant that has potential for the treatment of radiation sickness, neurological disorders and cancer. Cysteamine has FDA approval for use in humans, and produces few side-effects as a natural degradation product of an essential amino acid. It is mostly used for treatment of cystinosis. The inventors on this technology have demonstrated that cysteamine also

suppresses the activity of matrix metalloproteinases (MMPs). Because MMPs have been implicated in tumor invasion and metastasis, cysteamine has potential as an effective therapeutic for metastatic cancer. Administration of cysteamine was able to reduce invasion and metastasis in mouse xenograft tumor models and prolong survival of the mice without significant adverse side effects. This suggests that cysteamine could represent a novel therapeutic agent for treatment of metastatic cancer.

*Potential Commercial Applications:* Therapeutic for metastatic cancer as monotherapy or combined with other drugs.

**Competitive Advantages:**

- Cysteamine does not produce adverse side-effects when administered to humans.
- Cysteamine has already been approved for use in humans, providing a clearer path to clinical approval.

**Development Stage:**

- Pre-clinical.
  - In vitro data available.
  - In vivo data available (animal).
- Inventors:* Raj K. Puri and Bharat Joshi (CBER/FDA).

*Publication:* Fujisawa T, et al. Cysteamine suppresses invasion, metastasis and prolongs survival by inhibiting matrix metalloproteinases in a mouse model of human pancreatic cancer. PLoS One. 2012;7(4):e34437. [PMID 22532830]

*Intellectual Property:* HHS Reference No. E-219-2013/0—

- US Provisional Application No. 61/814,010.
- Canadian Application No. 2813514.
- Australian Application No. 2013205350.
- Korean Application No. 10-2013-43713.

*Licensing Contact:* David A. Lambertson, Ph.D.; 301-435-4632; [lambertsond@mail.nih.gov](mailto:lambertsond@mail.nih.gov).

**Encircling Suture Delivery System**

*Description of Technology:* The invention provides a novel delivery system for delivering an encircling suture which includes two separate hollow limbs held together at an articulation by the suture to be

delivered. The suture can extend through the hollow limbs, which slide along the suture. The distal ends of the limbs can be compressed into a desired delivery shape that allows the limbs to be advanced through the lumen of a delivery catheter (e.g., a transcatheter, transvascular or intraluminal catheter) into any body cavity. As the distal portions of the limbs move out of the delivery catheter, the limbs cooperatively assume a loop shape complementary to the shape of the target around the encircling suture to leave only the suture in the desired delivery position while maintaining desired suture tension and position. The delivery device can be placed around a variety of anatomical structures (e.g., heart, arterial appendage, cecal appendix, gall bladder, neoplasm, uterus, hemorrhoid, uvula, aneurysm, transected blood vessel, folded or looped lumen, intraocular crystalline lens or implanted intraocular lens or haptic, urinary bladder, kidney, prostate, intestine, or liver, etc.).

*Potential Commercial Applications:*

- Surgery.
  - Suturing.
  - Catheterization.
  - Cardiac valve repair.
- Competitive Advantages:*
- Formable suturing.
  - Circumferential suturing.
  - Flexible.
  - Easy to use.

*Development Stage:* Prototype.

*Inventors:* Toby Rogers, Robert Lederman, Merdim Sonmez, Dominique Franson, Ozgur Kocaturk (all of NHLBI).

*Intellectual Property:* HHS Reference No. E-115-2013/0—US Provisional Patent Application 61/834,357 filed June 12, 2013.

*Related Technologies:*

- HHS Reference No. E-027-2013/0—Devices and Methods for Treating Functional Tricuspid Valve Regurgitation.
- HHS Reference No. E-112-2010/0—Target and Capture Device for Transcatheter Cerclage Annuloplasty.
- HHS Reference No. E-108-2010/0—An Expandable Mesh Target and Capture Device for Transcatheter Cerciage Annuloplasty.

*Licensing Contact:* Michael Shmilovich; 301-435-5019; [shmilovm@mail.nih.gov](mailto:shmilovm@mail.nih.gov).

### Peptide Inhibitors of Polo-like Kinase 1 (PLK1) Useful as Anti-cancer Therapeutics

*Description of Technology:* PLK1 is being studied as a target for cancer drugs. Many colon and lung cancers are caused by KRAS mutations. These cancers are dependent on PLK1. Inhibition of PLK1 allows for selective killing of cancer cells without harm to normal cells. The peptide derivatives available for licensing have achieved both good efficacy and enhanced bioavailability.

*Potential Commercial Applications:* Development of selective cancer therapeutics.

*Competitive Advantages:* Enhanced bioavailability and higher binding efficacy over existing peptide PLK1 ligands.

*Development Stage:* Early-stage.

*Inventors:* Terrence R. Burke, Fa Liu, Wen-Jian Qian, Jung-Eun Park, Kyung S. Lee (all of NCI).

*Publications:*

- Liu F, et al. Serendipitous alkylation of a Plk1 ligand uncovers a new binding channel. *Nat Chem Biol*. 2011 Jul 17;7(9):595-601. [PMID 21765407].
  - Qian W, et al. Investigation of unanticipated alkylation at the N( $\pi$ ) position of a histidyl residue under Mitsunobu conditions and synthesis of orthogonally protected histidine analogues. *J Org Chem*. 2011 Nov 4;76(21):8885-90. [PMID 21950469].
  - Liu F, et al. Identification of high affinity polo-like kinase 1 (Plk1) polo-box domain binding peptides using oxime-based diversification. *ACS Chem Biol*. 2012 May 18;7(5):805-10. [PMID 22292814].
  - Liu F, et al. Peptoid-Peptide hybrid ligands targeting the polo box domain of polo-like kinase 1. *ChemBiochem*. 2012 Jun 18;13(9):1291-6. [PMID 22570300].
  - Qian W, et al. Effects on polo-like kinase 1 polo-box domain binding affinities of peptides incurred by structural variation at the phosphoamino acid position. *Bioorg Med Chem*. 2013 Jul 15;21(14):3996-4003. [PMID 22743087].
  - Qian W, et al. Non-proteinogenic amino acids in the pThr-2 position of a pentamer peptide that confer high binding affinity for the polo box domain (PBD) of polo-like kinase 1 (Plk1). *Bioorg Med Chem Lett*. 2012 Dec 15;22(24):7306-8. [PMID 23159568].
- Intellectual Property:* HHS Reference No. E-094-2013/0—US Application No. 61/784,971 filed March 14, 2013.

*Related Technologies:* HHS Reference Nos. E-181-2009/0, E-181-2009/1, E-181-2009/3, E-181-2009/4, E-053-2012/0—Development of Peptide Mimetic Ligands of Polo-like Kinase 1 Polo Box Domain.

*Licensing Contact:* Patrick McCue, Ph.D.; 301-435-5560; [mccuepat@mail.nih.gov](mailto:mccuepat@mail.nih.gov).

### Polymeric Silicone Hydrogel Vessel Mimetics for Cell Culturing

*Description of Technology:* The invention pertains to high oxygen diffusivity silicone hydrogel support structures that mimic tissue vasculature (e.g., capillary bed). Photolithographic methods are used to construct mimetic silicone hydrogel pillars that have, for example, a 20:1 height to diameter ratio. Advantageously, these mimetic silicone hydrogels diffuse oxygen from the bottom chamber to the cells cultured on the surface at near physiological rates (60 times that of water). Uses of these mimetics include 2-D screening for chemotherapeutic compounds and growth of tissue for grafting.

*Potential Commercial Applications:*

- Tissue engineering.
- Simulation of physiological growth conditions.

*Competitive Advantages:* High oxygen diffusivity.

*Development Stage:*

- Prototype.
- Pilot.
- In vitro data available.

*Inventors:* Chandan Das (NCI), Ashley Jaeger (CIT), Thomas Pohida (CIT), Randall Pursley (CIT), Philip McQueen (CIT), Nicole Morgan (NIBIB), Michael Gottesman (NCI).

*Intellectual Property:*

- HHS Reference No. E-070-2013/0—US Provisional Patent Application 61/758,198 filed January 29, 2013.
- HHS Reference No. E-070-2013/1—US Provisional Patent Application 61/773,064 filed March 5, 2013.

*Licensing Contact:* Michael Shmilovich; 301-435-5019; [shmilovm@mail.nih.gov](mailto:shmilovm@mail.nih.gov).

### Co-Transcriptional Assembly of Modified RNA Nanoparticles

*Description of Technology:* A method is provided for generating RNA nanoparticles having modified nucleotides and/or having increased nuclease resistance where the RNA nanoparticles are formed co-transcriptionally by T7 RNA polymerase in the presence of manganese ions.

*Potential Commercial Applications:* Inexpensive and efficient method of producing chemically modified RNA nanoparticles for diagnostic or therapeutic applications.

*Competitive Advantages:*

- Overcomes the cost and size limitations of solid-phase RNA synthesis.
- Allows complexity of RNA nanoparticles production.
- Increases retention time of RNA nanoparticles.

*Development Stage:*

- Early-stage.
- In vitro data available.

*Inventors:* Bruce A. Shapiro (NCI), Kirill Afonin (NCI), Maria Kireeva (NCI), Mikhail Kashlev (NCI), Luc Jaeger (Univ California, Santa Barbara), Wade Grabow (Univ California, Santa Barbara).

*Publications:*

- Afonin KA, et al. Co-transcriptional assembly of chemically modified RNA nanoparticles functionalized with siRNAs. *Nano Lett*. 2012 Oct 10;12(10):5192-5. [PMID 23016824].
  - Grabow WW, et al. "RNA Nanotechnology in Nanomedicine," in *Nanomedicine and Drug Delivery* (Recent Advances in Nanoscience and Nanotechnology), ed. M Sebastian, et al. (New Jersey: Apple Academic Press, 2012), 208-220. [Book Chapter].
  - Shukla GC, et al. A boost for the emerging field of RNA nanotechnology. *ACS Nano*. 2011 May 24;5(5):3405-18. [PMID 21604810].
  - Afonin KA, et al. Design and self-assembly of siRNA-functionalized RNA nanoparticles for use in automated nanomedicine. *Nat Protoc*. 2011 Dec 1;6(12):2022-34. [PMID 22134126].
  - Bindewald E, et al. Multistrand RNA secondary structure prediction and nanostructure design including pseudoknots. *ACS Nano*. 2011 Dec 27;5(12):9542-51. [PMID 22067111].
  - Grabow WW, et al. Self-assembling RNA nanorings based on RNAI/II inverse kissing complexes. *Nano Lett*. 2011 Feb 9;11(2):878-87. [PMID 21229999].
  - Kasprzak W, et al. Use of RNA structure flexibility data in nanostructure modeling. *Methods*. 2011 Jun;54(2):239-50. [PMID 21163354].
- Intellectual Property:* HHS Reference No. E-223-2012/0—US Provisional Application No. 61/698,227 filed 07 Sep 2012.
- Related Technologies:*
- HHS Reference No. E-059-2009/0—International Application No. PCT/US2010/038818.
  - HHS Reference No. E-038-2012/0—International Application No. PCT/US2012/065932.
  - HHS Reference No. E-039-2012/0—International Application No. PCT/US2012/065945.
- Licensing Contact:* John Stansberry; 301-435-5236; [stansbej@mail.nih.gov](mailto:stansbej@mail.nih.gov).

**Collaborative Research Opportunity:** The NCI Center for Cancer Research Nanobiology is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate or commercialize diagnostic or therapeutic RNA nanoparticles. For collaboration opportunities, please contact John Hewes, Ph.D. at [hewesj@mail.nih.gov](mailto:hewesj@mail.nih.gov).

Dated: July 12, 2013.

**Richard U. Rodriguez,**

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

[FR Doc. 2013-17319 Filed 7-18-13; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Notice of Kidney Interagency Coordinating Committee Meeting

**SUMMARY:** The Kidney Interagency Coordinating Committee (KICC) will hold a meeting on September 27, 2013, about interagency collaboration to improve outcomes in Chronic Kidney Disease (CKD). The meeting is open to the public.

**DATES:** The meeting will be held on September 27, 2013, 9 a.m. to 12 p.m. Individuals wanting to present oral comments must notify the contact person at least 10 days before the meeting date.

**ADDRESSES:** The meeting will be held at the Natcher Conference Center (Building 45), on the NIH Campus at 8600 Rockville Pike, Bethesda, MD 20894.

**FOR FURTHER INFORMATION CONTACT:** For further information concerning this meeting, contact Dr. Andrew S. Narva, Executive Secretary of the Kidney Interagency Coordinating Committee, National Institute of Diabetes and Digestive and Kidney Diseases, 31 Center Drive, Building 31A, Room 9A26, MSC 2560, Bethesda, MD 20892-2560, telephone: 301-594-8864; FAX: 301-480-0243; email: [nkdep@info.niddk.nih.gov](mailto:nkdep@info.niddk.nih.gov).

**SUPPLEMENTARY INFORMATION:** The KICC, chaired by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), comprises members of the Department of Health and Human Services and other federal agencies that support kidney-related activities, facilitates cooperation, communication, and collaboration on kidney disease among government entities. KICC meetings, held twice a year, provide an opportunity for Committee members to

learn about and discuss current and future kidney programs in KICC member organizations and to identify opportunities for collaboration. The September 27, 2013 KICC meeting will focus on interagency collaboration to improve outcomes in CKD.

Any member of the public interested in presenting oral comments to the Committee should notify the contact person listed on this notice at least 10 days in advance of the meeting. Interested individuals and representatives or organizations should submit a letter of intent, a brief description of the organization represented, and a written copy of their oral presentation in advance of the meeting. Only one representative of an organization will be allowed to present; oral comments and presentations will be limited to a maximum of 5 minutes. Printed and electronic copies are requested for the record. In addition, any interested person may file written comments with the Committee by forwarding their statement to the contact person listed on this notice. The statement should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person. Because of time constraints for the meeting, oral comments will be allowed on a first-come, first-serve basis.

Members of the public who would like to receive email notification about future KICC meetings should send a request to [nkdep@info.niddk.nih.gov](mailto:nkdep@info.niddk.nih.gov).

Dated: July 8, 2013.

**Camille Hoover,**

*Executive Officer, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health.*

[FR Doc. 2013-17360 Filed 7-18-13; 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 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:** Center for Scientific Review Special Emphasis Panel; Member Conflict: Immune Mechanism.

**Date:** July 30, 2013.

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

**Agenda:** To review and evaluate grant applications.

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

**Contact Person:** Scott Jakes, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4198, MSC 7812, Bethesda, MD 20892, 301-495-1506, [jakesse@mail.nih.gov](mailto:jakesse@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.

**Name of Committee:** Center for Scientific Review Special Emphasis Panel; RFA-OD-13-005: Restoration of New Investigator Pilot Projects Adversely Affected by Hurricane Sandy.

**Date:** August 14, 2013.

**Time:** 1:00 p.m. to 5:00 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:** Weihua Luo, MD, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5114, MSC 7854, Bethesda, MD 20892, (301) 435-1170, [luow@csr.nih.gov](mailto:luow@csr.nih.gov).

**Name of Committee:** Center for Scientific Review Special Emphasis Panel; Vascular Hematology.

**Date:** August 14, 2013.

**Time:** 2:00 p.m. to 3:00 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:** Bukhtiar H Shah, DVM, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4120, MSC 7802, Bethesda, MD 20892, 301-806-7314, [shahb@csr.nih.gov](mailto:shahb@csr.nih.gov).

(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: July 15, 2013.

**Melanie J. Gray,**

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

[FR Doc. 2013-17320 Filed 7-18-13; 8:45 am]

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