disorder, and 10 million have a thyroid-related condition that requires ongoing immunodiagnostic monitoring.

Development Status: Early stage.

Inventors: Marvin C. Gershengorn *et al.* (NIDDK).

Publications:

1. S Moore, H Jaeschke, G Kleinau, S Neumann, S Costanzi, JK Jiang, J Childress, BM Raaka, A Colson, R Paschke, G Krause, CJ Thomas, MC Gershengorn. Evaluation of small-molecule modulators of the luteinizing hormone/choriogonadotropin and thyroid stimulating hormone receptors: structure-activity relationships and selective binding patterns. *J Med Chem.* 2006 Jun 29;49(13):3888–3896.

2. S Titus, S Neumann,W Zheng, N Southall, S Michael, C Klumpp, A Yasgar, P Shinn, CJ Thomas, J Inglese, MC Gershengorn, CP Austin. Quantitative high throughput screening using a live cell cAMP assay identifies small molecule agonists of the TSH receptor. *J Biomol Screen.* 2008 Feb;13(2):120–127.

3. S Neumann, G Kleinau, S Costanzi, S Moore, BM Raaka, CJ Thomas, G Krause, MC Gershengorn: A low molecular weight antagonist for the human thyrotropin receptor with therapeutic potential for hyperthyroidism. *Endocrinology.* 2008 31 Jul; published online ahead of print, doi:10.1210/en.2008–0836.

Patent Status: International Patent Application No. PCT/US2007/011951 filed 17 May 2007 (HHS Reference No. E–223–2006/0-PCT–02).

Licensing Status: This technology is available for exclusive, co-exclusive, or nonexclusive licensing.

Licensing Contact: Tara L. Kirby, PhD; 301–435–4426; *tarak@mail.nih.gov.*

Methods for Accurately Measuring and Regulating Bound Adrenomedullin

Description of Technology: This technology involves an array of applications relating to a key discovery regarding adrenomedullin-binding proteins.

Adrenomedullin (AM) is a ubiquitously expressed peptide first found in human pheochromocytoma, a cancer of the adrenal medulla. AM appears to function as a universal autocrine growth factor, driving cell proliferation, as a vasodilator, as a mechanism for protecting cells against oxidative stress in hypoxic injury, and as a dose-dependent inhibitor of insulin secretion. Accordingly, methods for measuring in vivo levels of AM accurately, and methods for regulating the activity of available AM, may be critically important in diagnosis and treatment of many conditions, such as heart disease, pulmonary disease, liver cirrhosis, cancer, diabetes, sepsis, and inflammation.

The present technology centers on the observation that AM binds to Complement Factor H (CFH) in vivo. Without a means to determine the amount of AM that is bound to CFH, measurements of AM are inaccurate, and therapies focused on the AM-CFH complex may have advantages compared to therapies focused on AM alone.

The technology includes methods for measuring and utilizing purified AM-binding proteins, or functional portions thereof, to diagnose, treat, and monitor AM-related diseases. A second aspect includes the identification and isolation of the AM-CFH complex. Antibodies and small-molecule antagonists (which can down-regulate the function of AM, CFH, and the AM-CFH complex) have also been isolated. Collectively, the technology provides methods for diagnosis and treatment of conditions such as cancer, diabetes, or other conditions that are influenced by AM levels.

Applications and Advantages:

- More accurate measurements of serum adrenomedullin than current tests
- Antibodies targeting AM-CFH decrease bioavailable AM, which may be useful in suppressing angiogenesis in cancers
- Antibodies targeting the CFH binding site increase bioavailable AM, which may be useful in therapies involving vasodilation, angiogenesis, and tolerance for hypoxic or ischemic injury during stroke or myocardial infarction

Development Status: In vivo and *in vitro* proof of concept data are available.

Inventors: Frank Cuttitta *et al.* (NCI).

Related Publications:

1. AJ Dwivedi *et al.* Adrenomedullin and adrenomedullin binding protein-1 prevent acute lung injury after gut ischemia-reperfusion. *J Am Coll Surg.* 2007 Aug;205(2):284–293.

2. D Ajona *et al.* Down-regulation of human complement factor H sensitizes non-small cell lung cancer cells to complement attack and reduces in vivo tumor growth. *J Immunol.* 2007 May 1;178(9):5991–5998.

3. A Martínez *et al.* Mapping of the adrenomedullin-binding domains in human complement factor H. *Hypertens Res.* 2003 Feb;26 Suppl:S55–59.

4. R Pio *et al.* Complement factor H is a serum-binding protein for adrenomedullin, and the resulting complex modulates the bioactivities of both partners. *J Biol Chem.* 2001 Apr 13;276(15):12292–12300.

Patent Status: HHS Reference No. E–256–1999/0–

- U.S. Patent Application No. 11/530,441 filed 08 Sept 2006, claiming priority to 10 Sept 1999
- Foreign counterparts in Australia, Canada, France, Germany, Great Britain, Italy, Spain, and Portugal

Licensing Status: Available for exclusive or non-exclusive licensing.

Licensing Contact: Tara L. Kirby, PhD; 301–435–4426; *tarak@mail.nih.gov.*

Collaborative Research Opportunity: The National Cancer Institute (NCI)/ Angiogenesis Core Facility is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize AM-CFH complex involvement with tumor angiogenesis and identifying potential Rxs to disrupt this effect. Please contact John D. Hewes, PhD at 301–435–3121 or *hewesj@mail.nih.gov* for more information.

Dated: November 3, 2008.

Richard U. Rodriguez,

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

[FR Doc. E8–26790 Filed 11–10–08; 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, Public Health Service, 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. 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 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.

Microarray for Detection and Subtyping of Human Influenza Viruses

Description of Technology: Available for licensing and commercial development are a novel influenza virus microarray and methods for using the microarray for the identification of existing and new types and subtypes of human influenza viruses. There are three types of influenza viruses, type A, B and C. Influenza types A or B viruses cause epidemics of disease almost every winter, with type A causing a major pandemic periodically. Influenza type A viruses are further divided into subtypes based on two proteins on the surface of the virus. These proteins are called hemagglutinin (H) and neuraminidase (N). There are 16 known HA subtypes and 9 known NA subtypes of influenza A viruses. Each subtype may have different combinations of H and N proteins. Although there are only three known A subtypes of influenza viruses (H1N1, H1N2, and H3N2) currently circulating among humans, many other different strains are circulating among birds and other animals and these viruses do spread to humans occasionally. There is a requirement for sensitive and rapid diagnostic techniques in order to improve both the diagnosis of infections and the quality of surveillance systems. This microarray platform tiles the genomes of all types/subtypes of influenza viruses, and is capable of correctly identifying all 3 types/subtypes of influenza viruses from an influenza vaccine sample.

More specifically, the invention consists of: (1) Microarrays comprising a solid support with a plurality of n-mer influenza viral nucleotide segments of influenza Types A, B and C, including each respective subtype, and (2) methods of detecting and identifying known and unknown influenza viral types and subtypes by: (a) Using hybridization microarrays to known influenza viral nucleotide sequences, (b) sequencing the nucleotides which hybridize to the microarrays and (c) analyzing the hybridized sequences using existing databases, thus identifying existing or new subtypes of influenza viruses.

Applications: Detection and identification of human influenza viruses; Efficient discovery of new subtypes of influenza viruses; Diagnosis of influenza outbreaks.

Development Status: This microarray platform was capable of correctly identifying all 3 types/subtypes of influenza viruses from an influenza vaccine sample.

Inventors: Xiaolin Wu, Cassio S. Baptista, Elizabeth Shannon, and David J. Munroe (NCI).

Patent Status:

- U.S. Provisional Application No. 60/857,695 filed 07 Nov 2006 (HHS Reference No. E–208–2006/0–US–01);
- U.S. Patent Application No. 11/936,530 filed 07 Nov 2007 (HHS Reference No. E–208–2006/0–US–02);
- PCT Application No. PCT/US2007/023448 filed 07 Nov 2007 (HHS Reference No. E–208–2006/0–PCT–03).

Licensing Status: Available for non-exclusive or exclusive licensing.

Licensing Contact: Jeffrey A. James, PhD; 301–435–5474; *jeffreyja@mail.nih.gov.*

Novel Infrared (IR)-Transparent Hydrophilic Membrane That Can be Used for Filtration, Printing or Microarrays, and Cultivation of Bacteria and Other Microorganisms for Reagent-Free IR Spectroscopic Identification

Description of Technology: Available for licensing and commercial development is a novel, disposable infrared (IR)-transparent, microporous, plasma treated polyethylene hydrophilic membrane, as well as methods for making and using this membrane to identify bacterial and other micoorganism impurities in food using IR spectroscopy. Further applications include: Filtering dilute aqueous bacterial suspensions, and growing bacterial colonies when the PE membrane is placed over an agar medium and incubated. The patent also describes a novel high-throughout technique, as an alternative to manual filtration, where the PE membrane is used for microarray printing of intact microorganisms in pre-enriched medium on the treated PE substrate. Furthermore, the invention relates to a method of detecting mixtures of food-borne pathogens *E. sakazakii* and *K. pneumonia*, by using the treated PE membranes. Because this unique membrane is transparent to infrared light, isolated microcolonies of bacterial cells grown on this PE substrate can be fingerprinted directly by IR microspectroscopy, followed by multivariate analysis for the identification of the pathogens. The method can be applied to other cell types as well.

This novel membrane and its applications offer an advantage over existing tests in that it can be used to rapidly identify presumptive pathogen colonies, and can be used in screening tests for a large number of pathogens, as well as various microorganisms and cell types. It can also be used to isolate microorganisms from aqueous suspensions as well as spores, including airborne ones.

Inventors: Magdi M. Mossoba and Sufian Al-Khaldi (FDA).

Patent Status:

- U.S. Patent Application No. 11/343,561 filed 30 Jan 2006 (HHS Reference No. E–174–2005/0–US–01);
- U.S. Patent Application No. 12/150,048 filed 23 Apr 2008 (HHS Reference No. E–174–2005/0–US–02).

Licensing Status: Available for non-exclusive or exclusive licensing.

Licensing Contact: Jeffrey A. James, PhD; 301–435–5474; *jeffreyja@mail.nih.gov.*

Molecular Motors Powered by Proteins

Description of Technology: The technology available for licensing and commercial development relates to molecular motors powered by proteins. Some implementations describe a molecular motor in which multiple concentric cylinders or nested cones rotate around a common longitudinal axis. Opposing complementary surfaces of the cylinders or cones are coated with complementary motor protein pairs, such as actin and myosin. The actin and myosin interact with one another in the presence of ATP to rotate the cylinders or cones relative to one another, and this rotational energy is harnessed to produce work. Speed of movement is controlled by the concentration of ATP and the number of nested cylinders or cones. The length of the cylinders or cones can also be used to control the power generated by the motor.

Another configuration forms the motor out of a set of stacked disks, much like CDs on a spindle. The advantage of this form is extreme simplicity of construction compared to the nested cylinders or cones. In yet another configuration, which has aspects of both of the previous forms, the surfaces are broken into annular rings in order to overcome that the inner surfaces rotate at a different rate than the outer surfaces. This belt form may ultimately be used in molecular manufacturing.

Applications:

- Supplying power to prosthetic implants and other medical devices without external power sources.
- Many other applications that could use a motor in other biotechnological areas, in addition to the medical applications.
- The inventions can be implemented on either a microscopic or macroscopic scale.

Development Status: Very early stage of development.

Inventors: Thomas D. Schneider and Ilya G. Lyakhov (NCI).

Relevant Publications: ''Molecular motor'', Patent Publication Nos. WO 2001/009181 A1, published 02/08/2001; CA 2380611A1, published 02/08/2001; AU 6616600A, published 02/19/2001; EP 1204680A1, published 05/15/2002; and U.S. 20020083710, published 07/04/2002.

Patent Status:

• HHS Reference No. E–018–1999/0—International Application Number PCT/US 2000/20925 filed 31 Jul 2000; granted Application AU 2002/18688 B2, and the corresponding European and Canadian applications being prosecuted, all entitled ''Molecular Motor''

• HHS Reference No. E–018–1999/1—U.S. Patent No. 7,349,834 issued 25 Mar 2008, and U.S. Patent Application No. 12/011,239 filed 24 Jan 2008, both entitled ''Molecular Motor''

Licensing Status: Available for non-exclusive or exclusive licensing.

Licensing Contact: Jeffrey A. James, PhD; 301–435–5474; *jeffreyja@mail.nih.gov.*

Collaborative Research Opportunity: The National Cancer Institute, Center for Cancer Research Nanobiology Program is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize the Molecular Rotation Engine. Please contact John D. Hewes, PhD at 301–435–3121 or *hewesj@mail.nih.gov* for more information.

Dated: November 3, 2008.

Richard U. Rodriguez,

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

[FR Doc. E8–26794 Filed 11–10–08; 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. 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 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 Small Business: Orthopaedics and Skeletal Biology.

Date: November 18, 2008.

Time: 8:30 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: DoubleTree Hotel, 1515 Rhode Island Avenue, NW., Washington, DC 20005.

Contact Person: John P. Holden, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4211, MSC 7814, Bethesda, MD 20892, 301–496–8551, *holdenjocsr.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 Behavioral and Social HIV/AIDS Review of SBIR Applications.

Date: November 24, 2008.

Time: 10 a.m. to 1 p.m.

Agenda: To review and evaluate grant applications.

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

Contact Person: Mark P. Rubert, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5218, MSC 7852, Bethesda, MD 20892, 301–435–1775, *rubertmcsr.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 SBIR Environmental Monitoring and Remediation.

Date: December 2–3, 2008.

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

Agenda: To review and evaluate grant applications.

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

Contact Person: Alexander Gubin, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Rm 5144, MSC 7812, Bethesda, MD 20892, 301–435–2902, *gubina@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel AIDS Fellowship Application Review.

Date: December 2–3, 2008.

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

Agenda: To review and evaluate grant applications.

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

Contact Person: Mary Clare Walker, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5208, MSC 7852, Bethesda, MD 20892, (301) 435–1165, *walkermc@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel Brain Disorders and Clinical Neuroscience Member Conflict.

Date: December 2, 2008.

Time: 9 a.m. to 4 p.m.

Agenda: To review and evaluate grant applications.

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

Contact Person: Jay Joshi, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5196, MSC 7846, Bethesda, MD 20892, (301) 435–1184, *joshij@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel Kidney Dialysis, Monitoring and Therapeutics Small Business Applications Review.

Date: December 10–11, 2008.

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

Agenda: To review and evaluate grant applications.

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

Contact Person: Krystyna E. Rys-Sikora, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4016J, MSC 7814, Bethesda, MD 20892, 301–451–1325, *ryssokok@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel Member Conflicts: Neurobiology.

Date: December 10–11, 2008.

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

Agenda: To review and evaluate grant applications.

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

Contact Person: Christine L. Melchior, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5176, MSC 7844, Bethesda, MD 20892, (301) 435–1713, *melchioccsr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel Heart Metabolism and Physiology.

Date: December 11–12, 2008.

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

Agenda: To review and evaluate grant applications.

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

Contact Person: Larry Pinkus, PhD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4132, MSC 7802, Bethesda, MD 20892, (301) 435–1214, *pinkuslcsr.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)