

from this avian AAV are likely to find novel applications for gene therapy in humans. Furthermore because of their species of origin, this vector would also be useful in the engineering of avian cells.

Inventors: Ioannis Bossis and John A. Chiorini (NIDCR).

Publication: I Bossis, JA Chiorini. Cloning of an avian adeno-associated virus (AAAV) and generation of recombinant AAAV particles. *J Virol.* 2003 Jun;77(12):6799–6810.

Patent Status: U.S. Patent Application No. 10/557,662 filed 21 Dec 2006 (HHS Reference No. E-105-2003/0-US-03).

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

Licensing Contact: Jesse S. Kindra, J.D.; 301/435-5559; kindraj@mail.nih.gov

Collaborative Research Opportunity: The National Institute of Dental and Craniofacial Research, Laboratory of Dr. John Chiorini, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize gene therapy methods using AAV vectors. Please contact David W. Bradley, PhD at bradleyda@nidcr.nih.gov for more information.

Serotonin-Deficient Knock-Out Mouse

Description of Technology: Serotonin is an important modulator of many developmental, behavioral, and physiological processes, and it has been implicated in depression, anxiety, schizophrenia, obsessive compulsive disorders, and substance abuse. Serotonin's pharmacology is extremely complex and it is mediated by seven of serotonin receptor subtypes and it is present in several tissues. Although it has been a subject of a number of studies, its role has been difficult to ascertain. To investigate the role of serotonin in these disorders, the murine gene was disrupted by homologous recombination. Results indicate that serotonin binding sites were absent in different brain regions (brain stem, frontal cortex, hippocampus, and striatum), and its concentrations were reduced by 60–80%. These mice represent a powerful tool for the investigation of behavioral and neuropsychiatric disorders, and development of drug treatments for these disorders.

Applications: A model to study serotonin's role in behavioral and neuropsychiatric disorders.

Market:

1. Serotonin inhibitors are most widely used treatment in

neuropsychological disorders. Examples include Zoloft, Paxil, and Prozac.

2. Depression effects approximately 18.8 million U.S. citizens and over 121 million people worldwide.

3. Antidepressant market was worth \$16.2 billion in 2005, and it has annual growth of 2% year on year.

4. Anxiety disorders affect 40 million (18.1%) of the adult U.S. population.

5. Global anxiety disorder market was \$4.5 billion in 2006.

Inventors: Dennis L. Murphy (NIMH) *et al.*

Publications:

1. RF Ren-Patterson, LW Cochran, A Holmes, S Sherrill, SJ Huang, T Tolliver, K-P Lesch. Loss of brain-derived neurotrophic factor gene allele exacerbates brain monoamine deficiencies and increases stress abnormalities of serotonin transporter knockout mice. *J Neurosci Res.* 2005 Mar 15;79(6):756–771.

2. DL Murphy, A Lerner, G Rudnick, K-P Lesch. Serotonin transporter: gene, genetic disorders, and pharmacogenetics. *Mol Interv.* 2004 April;4(2):109–123.

3. RF Ren-Patterson, D-K Kim, X Zheng, S Sherrill, S-J Huang, T Tolliver, DL Murphy. Serotonergic-like progenitor cells propagated from neural stem cells in vitro: survival with SERT protein expression following implantation into brains of mice lacking SERT. *FASEB J.* 2005 Sep;19(11):1537–1539.

4. Q Li, A Holmes, L Ma, LD Van de Kar, F Garcia, DL Murphy. Medical hypothalamic 5-hydroxytryptamine (5HT)1A receptors regulate neuroendocrine responses to stress and exploratory locomotor activity application of recombinant adenovirus containing 5-HT1A sequences. *J Neurosci.* 2004 Dec 1;24(48):10868–10877.

5. F Kilic, DL Murphy, G Rudnick. A human serotonin transporter mutation causes constitutive activation of transport activity. *Mol Pharmacol.* 2003 Aug;64(2):440–446.

6. DL Murphy, GR Uhl, A Holmes, R Ren-Patterson, FS Hall, I Sora, S Detera-Wadleigh, K-P Lesch. Experimental gene interaction studies with SERT mutant mice as models for human polygenic and epistatic traits and disorders. *Genes Brain Behav.* 2003 Dec;2(6):350–364.

7. N Ozaki, D Goldman, WH Kaye, K Plotnicov, BD Greenberg, J Lappalainen, G Rudnick, DL Murphy. Serotonin transporter missense mutation associated with a complex neuropsychiatric phenotype. *Mol Psychiatry.* 2003 Nov;8(11):933–936.

Patent Status: HHS Reference No. B-019-1999/0—Research Tool.

Licensing Status: This technology is available as a research tool under a Biological Materials License.

Licensing Contact: Jennifer Wong; 301/435-4633; wongje@mail.nih.gov.

Dated: March 15, 2007.

Steven M. Ferguson,

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

[FR Doc. E7-5675 Filed 3-27-07; 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.

Microdialysis Probe for Accessing Tissue *in-vivo*

Description of Technology: Available for licensing and commercial development is a microdialysis probe. This device permits *in-vivo* measurement of bioavailable substances (e.g., cytokines, growth factors, neuropeptides, inflammatory mediators, etc.) at picogram levels of concentration directly from soft tissue and organ systems. The probe may also serve as an *in-situ* drug delivery vehicle of micro doses of medication to specific anatomical sites by slow diffusion. It also permits measurement of efficacy of drug delivery, whether given orally, systemically or topically, at the local

tissue level. It can be utilized in a variety of patient populations and conditions. For example, the probe can be used to monitor the local biochemical milieu in soft tissue and organ systems to provide insights into the pathophysiology of musculoskeletal, neuromuscular, rheumatic, gastrointestinal, renal, cardiovascular and endocrinologic diseases, cancers, dermatological conditions, and pediatric disorders, especially in premature newborns.

The probe is made from a small-bore (32 gauge) needle, whose probe surface has been fashioned to permit near trauma-less entry, containing both a fluid delivery and recovery tube within the bore. A molecular exchange membrane is positioned about 200 microns from the tip. Fluid flows across the membrane removing diffused molecules to a collection device. The rounded tip of the needle is designed to cause minimal tissue damage while allowing investigations to be performed on local tissue fluids. Additionally, this device allows simultaneous delivery of small concentrations of drug. In summary, this unique apparatus provides a minimally invasive means for sampling biological fluids in any human or animal organ or tissue and for *in-situ* drug-delivery, in continuous or incremental dosing, of extremely small doses.

Applications: Measurement of bioavailable substances in organs and soft tissues; Localized drug delivery vehicle; Measurement of tissue drug levels.

Market: Drug discovery; Tissue/fluid sampling; Pain management.

Inventors: Jay Shah (NIHCC), Terence Martyn Phillips (ORS), Jerome V. Danoff (NIHCC), Lynn Gerber (NIHCC).

Publication: JP Shah, TM Phillips, JV Danoff, LH Gerber. An *in vivo* microanalytical technique for measuring the local biochemical milieu of human skeletal muscle. *J Appl Physiol*. 2005 Nov; 99(5):1977–1984. Epub 2005 Jul 21.

Patent Status: U.S. Provisional Application No. 60/795,176 filed 27 Apr 2006 (HHS Reference No. E-024-2006/0-US-01).

Licensing Contact: Michael A. Shmilovich, Esq.; 301/435-5019; shmilovm@mail.nih.gov.

Fluorescent Intracellular Calcium Indicators

Description of Technology: Calcium is a key element in the regulation of many cellular processes, including muscle contraction, hormone excretion from gland cells, neurotransmitter release from nerve synapses, and the regulation

of cellular metabolism. Elevated calcium levels are found in a number of diseases.

The present invention relates to chromophoric or fluorescent dye calcium indicators that are superior for measurement of high concentrations of calcium ions due to their high dissociation constants. As a result of the high calcium ion dissociation constants, the perturbation resulting from introducing the indicator into the cell is greatly reduced. These calcium ion indicators can be measured by various techniques including 19F NMR spectroscopy, flow cytometry, and quantitative fluorescence techniques, and are useful for measuring calcium levels within the cytosol or within cellular organelles.

Application: Research tool for quantifying intracellular calcium concentrations.

Inventors: Robert E. London, Louis A. Levy, and Elizabeth Murphy (NIEHS).

Patent Status: U.S. Patent Application No. 08/175,590 filed 30 Dec 1993, which issued as U.S. Patent No. 5,516,911 on 14 May 1996 (HHS Reference No. E-015-1993/0-US-01).

Licensing Status: Available for nonexclusive licensing.

Licensing Contact: Tara Kirby, PhD; 301/435-4426; tarak@mail.nih.gov.

Collaborative Research Opportunity: The NIEHS Laboratory of Structural Biology is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize this technology. Please contact Dr. Robert London at 919/541-4879 or london@niehs.nih.gov for more information.

Dated: March 19, 2007.

Steven M. Ferguson,

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

[FR Doc. E7-5676 Filed 3-27-07; 8:45 am]

BILLING CODE 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Center on Minority Health and Health Disparities; 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: National Center on Minority Health and Health Disparities Special Emphasis Panel, LRP for Health Disparities and Clinical Research-Panel B.

Date: April 29, 2007.

Time: 9 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6707 Democracy Blvd./Suite 800, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Lorrta Watson, PhD, National Center on Minority Health, and Health Disparities, National Institutes of Health, 6707 Democracy Blvd., Suite 800, Bethesda, MD 20892-5465, (301) 402-1366, watsonl@ncmhd.nih.gov.

Name of Committee: National Center on Minority Health and Health Disparities Special Emphasis Panel, NCMHD Conference Grant Application (R13) Review.

Date: May 1, 2007.

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

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Two Democracy Plaza, 6707 Democracy Boulevard, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Robert Nettey, MD, Scientific Review Administrator, National Institute on Minority Health, and Health Disparities, 6707 Democracy Blvd., Suite 800, Bethesda, MD 20892, 301-496-3996.

Dated: March 21, 2007.

Jennifer Spaeth,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. 07-1516 Filed 3-27-07; 8:45 am]

BILLING CODE 4140-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Eye 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