

Dated: August 23, 2010.

Leslie Kux,

Acting Assistant Commissioner for Policy.

[FR Doc. 2010-21328 Filed 8-26-10; 8:45 am]

BILLING CODE 4160-01-S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Fiscal Year (FY) 2010 Funding Opportunity

AGENCY: Substance Abuse and Mental Health Services Administration, HHS.

ACTION: Notice of Intent to award a Single Source Supplement Grant to the National Center for Mental Health Promotion and Youth Violence Prevention at Educational Development Corporation (EDC) of Newton, Massachusetts.

SUMMARY: This notice is to inform the public that the Substance Abuse and Mental Health Services Administration (SAMHSA) intends to award approximately \$250,000 for up to fifteen months to expand grant activities funded under the Technical Assistance Center for Mental Health Promotion and Youth Violence Prevention to implement a Back to School media campaign targeted at the Gulf Coast schools impacted by the Deepwater oil spill. This is not a formal request for applications. This award is contingent upon the availability of funding. Assistance will be provided only to the current grantee of the Technical Assistance Center for Mental Health Promotion and Youth Violence Prevention based on the receipt of a satisfactory application that is approved by an independent review group.

Funding Opportunity Title: SM-10-020.

Catalog of Federal Domestic Assistance (CFDA) Number: 93.243.

Authority: Sections 501(d)(5), 501(d)(18), 520A, 231, of the Public Health Service (PHS) Act [42 U.S.C. 290aa; 42 U.S.C. 290bb-32, 42 U.S.C. 238, respectively].

Justification: Only an application from the current grantee, National Center for Mental Health Promotion and Youth Violence Prevention at Educational Development Corporation (EDC), will be considered for funding under this announcement. Fifteen-months funding may become available to implement a Back to School Media Support for Gulf Coast States Impacted by the Deepwater Oil Spill grant. The current grantee will provide technical assistance and is in a unique position to

address the needs of communities rapidly. This Center currently provides technical assistance and training to strengthen the capacity of active Safe Schools/Healthy Students grantees to sustain the use of evidence-based strategies for mental health promotion and school violence prevention. There is no other potential organization with the required access and expertise.

Eligibility for this program supplement is restricted to the current grantee, National Center for Mental Health Promotion and Youth Violence Prevention at Educational Development Corporation (EDC). Eligibility is limited because the magnitude of the Deepwater Horizon oil spill and its impact on the residents of the Gulf Coast region have led to an urgent need for disaster behavioral health communications services targeting school aged children, youth and their families. This supplement will serve to maximize efficiencies created under the current services infrastructure. It would be inefficient and duplicative to fund additional technical assistance services for a Back to School Media Support for Gulf Coast States Impacted by the Deepwater Oil Spill grant through a second organization.

Contact: Shelly Hara, Substance Abuse and Mental Health Services Administration, 1 Choke Cherry Road, Room 8-1095, Rockville, MD 20857; *telephone:* (240) 276-2321; *E-mail:* shelly.hara@samhsa.hhs.gov.

Dated: August 23, 2010.

Toian Vaughn,

SAMHSA Committee Management Officer.

[FR Doc. 2010-21339 Filed 8-26-10; 8:45 am]

BILLING CODE 4162-20-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.

System and Method for Producing Nondiffracting Light Sheets that Improves the Performance of Selective Plane Illumination Microscopy (SPIM)

Description of Invention: The technology offered for licensing relates to a system and method of producing nondiffracting beams of light that spatially overlap, but do not interfere with each other when intersecting the detection plane of an optical arrangement. The system includes an illumination source (*i.e.* ultrafast laser) for transmitting a beam of light through the optical arrangement that includes a diffraction grating for diffracting the light beam to produce beams of light having different wavelengths, which are then passed through an annular aperture that transforms the beams of light into nondiffracting beams having different wavelengths. The method can be readily utilized in Selective Plane Illumination Microscopy (SPIM), a system that provides optical sectioning of a sample that is labeled with fluorescent dyes. SPIM can provide quantitative three-dimensional maps of the distribution of a fluorophore within the sample with high spatiotemporal resolution and an excellent signal-to-noise ratio. The standard SPIM technique however produces nonuniform axial resolution, which is caused by the diffraction of the laser beam through the sample, causing degradation in the optical sectioning, and forcing a compromise between field of view and axial resolution.

Techniques for decoupling field of view and axial resolution have previously utilized nondiffracting beams (*e.g.* Bessel beams) for sample illumination. The resulting interference from multiple nondiffracting beams degrades the quality of optical sectioning and the quality of the image. The present technology utilizing nondiffracting noninterfering beams is intended to alleviate the problems associated with the currently used SPIM techniques.

Applications: In Selective Plane Illumination Microscopy (SPIM) used for optical sectioning and imaging of biological samples.

Development Status: Proof of concept has been demonstrated.

Inventors: Andrew York, Yicong Wu, Hari Shroff (NIBIB)

Relevant Publications

1. Durnin J, Micheli J Jr, Eberly JH. Diffraction-free beams. *Phys Rev Lett*. 1987 Apr 13;58(15):1499–1501.
2. Greger K, Swoger J, Stelzer EH. Basic building units and properties of a fluorescence single plane illumination microscope. *Rev Sci Instrum*. 2007 Feb;78(2):023705. [PubMed: 17578115]
3. Fahrback F, Rohrbach A. Microscopy with Non-diffracting Beams. Abstract at 2009 Focus on Microscopy Conference, http://www.focusonmicroscopy.org/2009/PDF/281_Fahrback.pdf.
4. Rohrbach A. Artifacts resulting from imaging in scattering media: a theoretical prediction. *Opt Lett*. 2009 Oct 1;34(19):3041–3043. [PubMed: 19794809]

Patent Status: U.S. Provisional Application No. 61/360,352 filed 30 Jun 2010, entitled “System and Method of Producing Nondiffracting Light Sheets by a Multiplicity of Spatially Overlapping, Minimally Interfering Nondiffracting Optical Beams” (HHS Reference No. E–118–2010/0–US–01).

Licensing Status: Available for licensing.

Licensing Contacts

- Uri Reichman, Ph.D., MBA; 301–435–4616; UR7a@nih.gov.
- Michael Shmilovich, Esq.; 301–435–5019; shmilovm@mail.nih.gov.

Collaborative Research Opportunity: The NIBIB Section on High Resolution Optical Imaging is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize the nondiffracting Light Sheets for SPIM. Please contact Hari Shroff at 301–435–1995 or hari.shroff@nih.gov for more information.

Method of Producing Immortalized Primary Human Keratinocytes for HPV Investigation, Testing of Therapeutics, and Skin Graft Generation

Description of Invention: One of the major limitations of using cultured keratinocytes for research studies is that primary keratinocytes senesce after a few passages. Keratinocytes from specific anatomical sites are also difficult to culture. Scientists at the NIH have demonstrated that primary keratinocytes, from several anatomical sites, when treated with a small-molecule inhibitor of the ROCK protein maintain a proliferative state and become immortal without genetic modification to the cells. Keratinocytes are also the host cells for human

papillomaviruses (HPVs) and other viruses and this technology enables the study of those viruses that do not immortalize cells. In addition, this technology may enhance the quantity of material available for skin grafts, as current grafting techniques are limited by the amount of donor material immediately available. Thus, this technology may provide an ideal model environment for producing large quantities of both normal and diseased primary human keratinocytes from small numbers of primary cells from individual hosts or anatomical sites for research purposes, testing of therapeutics, skin graft generation and HPV investigation.

Applications

- Promotion of sustained primary human keratinocyte proliferation *in vitro*.
- Human skin graft cultures and techniques.
- Immortalization of both normal and diseased cells from individual hosts.
- Immortalization of “difficult to establish” keratinocytes from different anatomical sites.
- *In vitro* assay for investigating the full life cycle of HPV.
- *In vitro* screen for HPV inhibitors.

Advantages

- Allows culture and immortalization of many types of keratinocytes that are difficult to establish and pass in culture.
- Allows isolation of diseased and normal keratinocytes from individual hosts for research and therapeutic purposes.
- Current HPV investigations are limited by keratinocyte senescence.
- Skin graft generation is currently dependent on slow culture of limited quantities of donor material.

Development Status: Early stage: cell-based assays using primary human cells.

Market: Over 6 million individuals become infected by genital HPV every year and over 500,000 new cases of anal and genital warts are diagnosed annually in the United States (<http://www.cancer.org>). At least 40,000 American burn victims are hospitalized annually, including 25,000 admissions to hospitals with specialized burn centers (<http://www.ameriburn.org>) and skin grafts for diabetic ulcers are increasing. Skin disease is very prevalent and is estimated to affect greater than 50% of individuals in Western countries (Rea *et al.*, *British Journal of Preventive and Social Medicine* 30: 107–14, 1976).

Inventors: Alison McBride (NIAID), Sandra E. Chapman (NIAID), Jonathan C. Vogel (NCI), Atsushi Terunuma (NCI).

Publication: Chapman S *et al.* Human keratinocytes are efficiently immortalized by a Rho kinase inhibitor. *J Clin Invest*. 2010 Jul 1;120(7):2619–26. [PubMed: 20516646].

Patent Status: PCT Patent Application No. PCT/US2009/066844 filed 12 Apr 2009, which published as WO/2010/065907 on 10 Jun 2010 (HHS Reference No. E–055–2009/0–PCT–02).

Licensing Status: Available for licensing.

Licensing Contact: Jeffrey Clark Klein, Ph.D.; 301–594–4697; kleinjc@mail.nih.gov.

Collaborative Research Opportunity: The National Institute of Allergy and Infectious Diseases, Laboratory of Viral Diseases is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize methods of producing immortalized primary human keratinocytes. Please contact Johanna Schneider, Ph.D. at 301–451–9824 or schneiderjs@niaid.nih.gov for more information.

Novel Drugs for the Treatment of Schizophrenia

Description of Invention: Because psychosis and cognitive decline are among the most common debilitating afflictions of humans, the search for new treatments is very important and timely.

Researchers at the NIH have found that genetic variations on the *PIK3CD* gene are associated with schizophrenia in Caucasian and African American families and can affect normal human cognition functions such as memory, IQ and executive cognition. The inventors have shown that an inhibitor of the phosphatidylinositol 3-kinase p110 delta (*PIK3CD*) enzyme, which is encoded by the *PIK3CD* gene, significantly improves a migratory response that is critically impaired in schizophrenic patients. This drug, as well as other *PIK3CD* inhibitors, could provide effective treatments of psychosis and cognitive decline.

Applications: Novel target for development of therapeutics of CNS disorders including schizophrenia, psychosis, and cognitive deficiency.

Development Status: Early stage: *in vivo* rodent and *in vitro* human cells.

Market: According to BioPortfolio, the world schizophrenia market was \$12 billion in 2004. Schizophrenia affects approximately 0.5% of both the U.S. and world populations.

Inventors: Amanda J. Law and Daniel R. Weinberger (NIMH).

Publication: In preparation.

Patent Status: PCT Application No. PCT/US2009/66867 filed 04 Dec 2009 (HHS Reference No. E-054-2009/0-PCT-02).

Licensing Status: Available for licensing.

Licensing Contact: Charlene Sydnor, Ph.D.; 301-435-4689; sydnorc@mail.nih.gov.

Collaborative Research Opportunity: The National Institute of Mental Health Clinical Brain Disorders Branch is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize the development of PIK3CD inhibitors for the treatment of CNS disorders including schizophrenia, psychosis, and cognitive deficiency. Please contact Amanda Law at lawa@mail.nih.gov for more information.

Fast Electron Paramagnetic Resonance Imaging (EPRI) Using CW-EPR Spectrometer With Sinusoidal Rapid-Scan and Digital Signal Processing

Description of Invention: Electron Paramagnetic Resonance (EPR) Imaging is an indispensable tool that may be applied to a variety of disciplines for evaluation of chemical species having unpaired electrons such as free radicals and transition metal ions. In Continuous Wave (CW)-EPR the sample is continuously irradiated with weak RF radiation while sweeping the magnetic field relatively slowly. Existing CW-EPR techniques utilize a signal detection method known as phase-sensitive detection which results in data acquisition times that are too long for in vivo applications. The present technology represents significant improvements on conventional CW-EPR.

The subject technology includes three approaches to collecting image data with increased spatial, temporal and spectral resolution and improved sensitivity. Spectral data acquisition is performed by a direct detection strategy involving mixing a signal to base-band and acquiring data with a fast-digitizer. Projection data is acquired using a sinusoidal magnetic field sweep under gradient magnetic fields. Data collection times are decreased with the utility of rotating gradients.

Further improvement to the present technology includes optimized DSP (digital signal processing) transmit and receive systems that decrease the analog background noise and allow optimizing the extent of signal averaging for improved image quality.

Increased speed and sensitivity make CW-EPR a potentially useful and complementary tool to proton Magnetic

Resonance Imaging for in vivo imaging. The presently described improvements to CW-EPR will allow changes of blood perfusion and oxygenation in tumors to be observed in nearly real-time, while improved resolution will permit angiogenesis in and around tumors to be monitored in a non-invasive manner. Additionally, rapid scan imaging provides excellent temporal resolution and will help quantify pharmacokinetics and metabolic degradation kinetics of bioactive and redox sensitive free radicals such as nitroxides.

Applications

- Enhanced spatial, temporal, and spectral resolution of Continuous Wave-Electron Paramagnetic Resonance Imaging.

- Real-time assessment of changes in blood perfusion and oxygenation.

Development Status: Preliminary experiments have been conducted and the technology has been tested for feasibility.

Inventors: Sankaran Subramanian *et al.* (NCI).

Relevant Publication: Subramanian S, Koscielniak JW, Devasahayam N, Pursley RH, Pohida TJ, Krishna MC. A new strategy for fast radiofrequency CW EPR imaging: Direct detection with rapid scan and rotating gradients. *J Magn Reson.* 2007 Jun; 186(2):212-219. [PubMed: 17350865].

Patent Status

- U.S. Provisional Application No. 60/818,052 filed 30 Jun 2006 (HHS Reference No. E-221-2005/0-US-01).
- PCT Application No. PCT/US07/00072371 filed 02 Jul 2007, which published as WO 2008/091365 on 31 Jul 2008 (HHS Reference No. E-221-2005/1-PCT-01).

- U.S. Patent Application No. 12/306,514 filed 23 Dec 2008 (HHS Reference No. E-221-2005/1-US-02).

- U.S. Patent Application No. 12/564,006 filed 21 Sep 2009 (HHS Reference No. E-221-2005/2-US-01).

Licensing Status: Available for licensing.

Licensing Contacts

- Uri Reichman, PhD, MBA; 301-435-4616; UR7a@nih.gov.

- John Stansberry, PhD; 301-435-5236; js852e@nih.gov.

Collaborative Research Opportunity: The National Cancer Institute, Radiation Biology Branch, is seeking statements of capability or interest from parties interested in collaborative research to further develop improved hardware in terms of higher gradient & sweep frequencies and compatible AC amplifiers and evaluate, or

commercialize the above rapid scan-rotating gradients strategy for performing routine in vivo radiofrequency CW EPR imaging in small animals. Please contact John D. Hewes, PhD, at 301-435-3121 or hewesj@mail.nih.gov for more information.

Dated: August 20, 2010.

Richard U. Rodriguez,

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

[FR Doc. 2010-21347 Filed 8-26-10; 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.

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An XMRV Tool Box: Expression Plasmids, Genes, and Proteins for All Components of the Xenotropic Murine Leukemia Virus-Related Virus (XMRV)

Description of Invention: The xenotropic murine leukemia virus-related virus (XMRV) has been implicated as a possible causative agent of prostate cancer and chronic fatigue syndrome (CFS). Scientists at the National Institutes of Health (NIH) and Science Applications International Corporation in Frederick, MD (SAIC-Frederick) have developed sixty four (64) protein expression plasmids for components of XMRV. One or more