

activity including that of PPT1. Unfortunately, the inherent toxicity of HA precludes its clinical use for any disorder. The inventors evaluated several non-toxic derivatives of HA for anti-oxidant properties, the ability to cleave thioester linkage in S-acylated proteins, the ability to mediate ceroid depletion, to suppress apoptosis in cultured cells from INCL patients and in *Ppt1*-knockout (*Ppt1*<sup>-/-</sup>) mice. Specifically, the inventors have discovered that NtBuHA is non-toxic, manifests potent antioxidant property, cleaves thioester linkages in S-acylated proteins, depletes intracellular ceroid in *Ppt1*<sup>-/-</sup> mice and extends lifespan. These results demonstrated that NtBuHA may be broadly useful as therapeutic agents for thioesterase deficiency disorders including INCL.

**Potential Commercial Applications:** Compositions and methods to treat or prevent thioesterase deficiency disorders

**Competitive Advantages:**

- Currently there are no effective treatments for INCL and N-t-BuHA will be the first specific treatment targeting INCL
  - N-t-BuHA can be developed as a broad spectrum therapeutic against thioesterase deficiency disorders.

**Development Stage:** In vivo data available (animal)

**Inventors:** Anil Baran Mukherjee, Chinmoy Sarkar, Zhongjian Zhang (all of NICHD)

**Publication:** Sarkar C, et al. Neuroprotection and lifespan extension in *Ppt1*<sup>-/-</sup> mice by NtBuHA: therapeutic implications for INCL. *Nat Neurosci*. 2013 Nov;16(11):1608–17. [PMID 24056696]

**Intellectual Property:** HHS Reference No. E-157-2011/0 –

- U.S. Patent Application No. 14/110,393 filed 07 Oct 2013
- EP Patent Application No. 12716889.6 filed 07 Oct 2013

**Licensing Contact:** Suryanarayana Vepa, Ph.D., J.D.; 301-435-5020; [vepas@mail.nih.gov](mailto:vepas@mail.nih.gov)

**Collaborative Research Opportunity:** The Eunice Kennedy Shriver National Institute of Child Health and Human Development is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate or commercialize hydroxylamine-derivatives or other small molecules with similar properties for treating thioesterase deficiency diseases including infantile neuronal ceroid lipofuscinosis (INCL). For collaboration opportunities, please contact Joseph M.

Conrad, Ph.D., J.D. at [jmconrad@mail.nih.gov](mailto:jmconrad@mail.nih.gov) or 240-276-5495.

**Non-Invasive In Vivo MR Method to Image Salient Features of Nerves**

**Description of Technology:** The invention consists of a novel diffusion MRI experiment and modeling framework that describes white matter in the central nervous system (CNS) and nerves in the peripheral nervous system (PNS) as composite media having intra- and extra axonal spaces with different water diffusion characteristics. Specifically, fascicles in the nervous system are modeled as having a hindered extracellular region and a restricted intracellular or intra-axonal region. Diffusion of water in these two distinct compartments contributes to the total measured diffusion MRI signal. This method provides a voxel-by-voxel measurement of the intra- and extra-axonal volume fractions, and an estimate of the mean axon diameter. This technology is also incorporated in NIH's AxCaliber MRI technology, which extends it, treating fascicles as a bundle of impermeable cylinders having a distribution of internal diameters.

The significance of this invention is that it provides measurements of new and useful microanatomical features of white matter (and gray matter) that are closely related to the function of the nervous system—particularly the speed that information travels along axons—critically important in medicine and the neurosciences. Previously, the data provided by this non-invasive MR imaging method were only available using invasive and laborious histological means requiring tissue biopsy.

**Potential Commercial Applications:**

- clinical MRI
  - small animal or pre-clinical MRI
- Competitive Advantages:**
- non-invasive, painless, in vivo measurement of microanatomical features of nerves and muscles.
  - no contrast agents required
  - modest data requirements allow for scans to be performed in a clinically feasible time-frame

**Development Stage:**

- Early-stage
- In vitro data available
- In vivo data available (animal)
- In vivo data available (human)
- In situ data available (on-site)
- Prototype

**Inventors:** Peter J. Bassar (NICHD), Yaniv Assaf (Tel Aviv University)

**Publications:**

1. Assaf Y, et al. New modeling and experimental framework to characterize hindered and restricted water diffusion

in brain white matter. *Magn Reson Med*. 2004 Nov;52(5):965–78. [PMID 15508168]

2. Assaf Y, Bassar PJ. Composite hindered and restricted model of diffusion (CHARMED) MR imaging of the human brain. *Neuroimage* 2005 Aug 1;27(1):48–58. [PMID 15979342]
3. Assaf Y, Bassar PJ. Combining DT and q-space MRI: a new model of white matter in the brain. In *Proc. Intl. Soc. Mag. Reson. Med.* 2003;11:588. [<http://cds.ismrm.org/ismrm-2003/ismrm03.pdf>]
4. Assaf Y, et al. A New Modeling and Experimental Framework to Characterize Hindered and Restricted Water Diffusion in Brain White Matter. In *Proc. Intl. Soc. Mag. Reson. Med.* 2004;11:251. [<http://cds.ismrm.org/ismrm-2004/Files/Program04.pdf>]

**Intellectual Property:** HHS Reference No. E-079-2003/1—US Patent No. 8,380,280 filed 19 Feb 2013

**Related Technologies:**

- HHS Reference No. E-203-1993/0—U.S. Patent No. 5,539,310 issued 23 Jul 1996
- HHS Reference No. E-079-2003/0—U.S. Patent No. 7,643,863 issued 05 Jan 2010
- HHS Reference No. E-276-2008/0—U.S. Patent No. 8,704,515 issued 22 Apr 2014

**Licensing Contact:** John Stansberry, Ph.D.; 301-435-5236; [stansbej@mail.nih.gov](mailto:stansbej@mail.nih.gov)

**Collaborative Research Opportunity:** The Eunice Kennedy Shriver National Institute of Child Health and Human Development is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate or commercialize novel MRI methods to probe tissue structure and organization, particularly for neuroimaging applications. For collaboration opportunities, please contact Alan E. Hubbs at [hubbsa@mail.nih.gov](mailto:hubbsa@mail.nih.gov) or 240-276-5530.

Dated: May 12, 2014.

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

[FR Doc. 2014-11146 Filed 5-14-14; 8:45 am]

**BILLING CODE 4140-01-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**National Institutes of Health**

**Center For Scientific Review; Amended Notice of Meeting**

Notice is hereby given of a change in the meeting of the Clinical and Integrative Diabetes and Obesity Study

Section, June 05, 2014, 08:00 a.m. to June 06, 2014, 06:00 p.m., Residence Inn Bethesda, 7335 Wisconsin Avenue, Bethesda, MD, 20814 which was published in the **Federal Register** on May 07, 2014, 79 FR 26261.

The meeting will be held on June 5, 2014. The meeting location and time remain the same. The meeting is closed to the public.

Dated: May 9, 2014.

**Carolyn Baum,**

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

[FR Doc. 2014-11144 Filed 5-14-14; 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: Neural Trauma, Stroke and Epilepsy.

*Date:* June 6, 2014.

*Time:* 12:00 p.m. to 4:00 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:* Alexei Kondratyev, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5200, MSC 7846, Bethesda, MD 20892, 301-435-1785, [kondratyevad@csr.nih.gov](mailto:kondratyevad@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; Cancer, Cardiovascular, and Sleep Epidemiology Panel A.

*Date:* June 9, 2014.

*Time:* 8:00 a.m. to 6:30 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:* Denise Wiesch, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3138, MSC 7770, Bethesda, MD 20892, (301) 437-3478, [wieschd@csr.nih.gov](mailto:wieschd@csr.nih.gov).

*Name of Committee:* Integrative, Functional and Cognitive Neuroscience Integrated Review Group; Neuroendocrinology, Neuroimmunology, Rhythms and Sleep Study Section.

*Date:* June 9-10, 2014.

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

*Agenda:* To review and evaluate grant applications.

*Place:* Admiral Fell Inn, 888 South Broadway, Baltimore, MD 21231.

*Contact Person:* Michael Selmanoff, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5164, MSC 7844, Bethesda, MD 20892, 301-435-1119, [mselmanoff@csr.nih.gov](mailto:mselmanoff@csr.nih.gov).

*Name of Committee:* Oncology 2—Translational Clinical Integrated Review Group; Clinical Oncology Study Section.

*Date:* June 9, 2014.

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

*Agenda:* To review and evaluate grant applications.

*Place:* Sir Francis Drake Hotel, 450 Powell Street at Sutter, San Francisco, CA 94102.

*Contact Person:* Malaya Chatterjee, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6192, MSC 7804, Bethesda, MD 20892, 301-806-2515, [chatterm@csr.nih.gov](mailto:chatterm@csr.nih.gov).

*Name of Committee:* Integrative, Functional and Cognitive Neuroscience Integrated Review Group; Somatosensory and Chemosensory Systems Study Section.

*Date:* June 10-11, 2014.

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

*Agenda:* To review and evaluate grant applications.

*Place:* Embassy Suites DC Convention Center, 900 10th Street NW., Washington, DC 20001.

*Contact Person:* M Catherine Bennett, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5182, MSC 7846, Bethesda, MD 20892, 301-435-1766, [bennetc3@csr.nih.gov](mailto:bennetc3@csr.nih.gov).

*Name of Committee:* Bioengineering Sciences & Technologies Integrated Review Group; Modeling and Analysis of Biological Systems Study Section.

*Date:* June 10, 2014.

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

*Agenda:* To review and evaluate grant applications.

*Place:* Hyatt Regency Bethesda, One Bethesda Metro Center, 7400 Wisconsin Avenue, Bethesda, MD 20814.

*Contact Person:* Craig Giroux, Ph.D., Scientific Review Officer, BST IRG, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5150, Bethesda, MD 20892, 301-435-2204, [girouxcn@csr.nih.gov](mailto:girouxcn@csr.nih.gov).

*Name of Committee:* Interdisciplinary Molecular Sciences and Training Integrated Review Group; Enabling Bioanalytical and Imaging Technologies Study Section.

*Date:* June 10-11, 2014.

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

*Agenda:* To review and evaluate grant applications.

*Place:* Renaissance Washington DC, Dupont Circle, 1143 New Hampshire Avenue NW., Washington, DC 20037.

*Contact Person:* Dennis Hlasta, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6185, MSC 7892, Bethesda, MD 20892, 301-435-1047, [dennis.hlasta@nih.gov](mailto:dennis.hlasta@nih.gov).

*Name of Committee:* Biology of Development and Aging Integrated Review Group; International and Cooperative Projects—1 Study Section.

*Date:* June 10, 2014.

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

*Agenda:* To review and evaluate grant applications.

*Place:* Manhattan Beach Marriott Hotel and Golf Club, 1400 Parkview Avenue, Manhattan Beach, CA 90266.

*Contact Person:* Hilary D. Sigmon, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5222, MSC 7852, Bethesda, MD 20892, (301) 594-6377, [sigmonh@csr.nih.gov](mailto:sigmonh@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; RFA Panel; Investigations on Primary Immunodeficiency Diseases.

*Date:* June 10, 2014.

*Time:* 11:30 a.m. to 3:00 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).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; PAR-14-008: Secondary Analysis to Explore NIMH Research Domain Criteria.

*Date:* June 10, 2014.

*Time:* 1:00 p.m. to 4:00 p.m.

*Agenda:* To review and evaluate grant applications.

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

*Contact Person:* Julius Cinque, MS, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5186, MSC 7846, Bethesda, MD 20892, (301) 435-1252, [cinquej@csr.nih.gov](mailto:cinquej@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; Member Conflicts: Liver and Gastrointestinal Physiology and Pathophysiology.

*Date:* June 10, 2014.

*Time:* 1:00 p.m. to 4:30 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).