



TSC ALERT

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April 2006

Welcome to the April 2006 edition of *TSC Alert* – an online research newsletter for individuals interested in Tuberous Sclerosis Complex (TSC) research and clinical care. This online newsletter contains information of interest to the TSC research and health care community. Please forward this newsletter to colleagues who are interested in TSC. To be added/deleted to/from the mailing list for *TSC Alert* and/or to submit information for the May 2006 *TSC Alert* contact: vwhittemore@tsalliance.org

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IMPORTANT ANNOUNCEMENTS

NUTRIENT SENSING, INSULIN SIGNALING AND HAMARTOMA SYNDROMES CONFERENCE
This conference will be held May 11- 12, 2006 in Lister Hall, National Institutes of Health, Bethesda, MD. Organized and sponsored by the National Institute of Diabetes and Digestive and Kidney Disease, the National Cancer Institute, and the Office of Rare Diseases, National Institutes of Health. For more information, see: <http://www.niddk.nih.gov/fund/other/nutrientsensing/index.htm>

FUNDING OPPORTUNITIES

TUBEROUS SCLEROSIS COMPLEX RESEARCH PROGRAM (TSCRCP) IN CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAM (CDMRP) RELEASES RFPs

Three award mechanisms are available for TSC researchers:

Concept Awards

Clinical Resource Development Awards

Idea Development Awards

Submission deadline: April 25, 2006

Funding Notification: November 2006

Information on the TSCRCP and the RFPs: <http://cdmrp.army.mil/tscrcp/default.htm>

Understanding and treating Tuberous Sclerosis Complex (R01) (PAS-06-205)

National Institute of Neurological Disorders and Stroke

National Cancer Institute

National Institute of Arthritis and Musculoskeletal and Skin Diseases

National Institute of Diabetes and Digestive and Kidney Diseases

National Institute of Mental Health

Tuberous Sclerosis Alliance

Application Receipt/Submission Date(s): Multiple dates, see announcement.

<http://grants.nih.gov/grants/guide/pa-files/PAS-06-205.html>

Understanding and treating Tuberous Sclerosis Complex (R21) (PAS-06-206)

National Institute of Neurological Disorders and Stroke

National Cancer Institute

National Institute of Arthritis and Musculoskeletal and Skin Diseases

National Institute of Diabetes and Digestive and Kidney Diseases

National Institute of Mental Health

Tuberous Sclerosis Alliance

Application Receipt/Submission Date(s): Multiple dates, see announcement.

<http://grants.nih.gov/grants/guide/pa-files/PAS-06-206.html>

Research on Sleep and Sleep Disorders (R21) (PA-06-238)

National Heart, Lung, and Blood Institute

National Center for Complementary and Alternative Medicine

National Cancer Institute

National Center on Sleep Disorders Research

National Institute on Aging

National Institute on Alcohol Abuse and Alcoholism

National Institute of Arthritis and Musculoskeletal and Skin Diseases

National Institute of Child Health and Human Development

National Institute on Drug Abuse

National Institute of Mental Health

National Institute of Neurological Disorders and Stroke

National Institute of Nursing Research

Office of Research on Women's Health

Application Receipt/Submission Date(s): Multiple dates, see announcement.

<http://grants.nih.gov/grants/guide/pa-files/PA-06-238.html>

NHLBI Innovative Research Grant Program (R21) (PA-06-239)

National Heart, Lung, and Blood Institute

Application Receipt/Submission Date(s): Multiple dates, see announcement.

<http://grants.nih.gov/grants/guide/pa-files/PA-06-239.html>

**Amendments and Corrections to RFA-HG-06-001 "Genome Sequencing Centers"
NOT-HG-06-010**

National Human Genome Research Institute

On December 22, 2005, the National Institutes of Health (NIH) issued a Request for Applications entitled, RFA-HG-06-001, "Genome Sequencing Centers" (<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-06-001.html>). This Notice is to inform the scientific community that the NIH is amending the RFA as follows.

A primary objective for the "Genome Sequencing Centers" is to maximize the public benefit of the data produced. Accordingly, awardees should manage intellectual property (IP) and data in a way that achieves this goal. In the case of the TCGA, as well as many of the medical sequencing projects, awardees are expected to generate a large collection of data that will serve as a foundation for the scientific community to develop future diagnostics, therapeutics and other medical applications. To

achieve the objective of producing and broadly sharing the resources generated by both TCGA and the medical sequencing portion of the proposed sequencing capacity, applicants should develop a comprehensive IP and data management strategy that is consistent with the NIH Research Tools Policy. For more detailed information, please see:

<http://grants1.nih.gov/grants/guide/notice-files/NOT-HG-06-010.html>

Solicitation of Samples from Case-Control Studies for Genotyping through the Genetic Association Information Network (GAIN) (NOT-HG-06-009)

The Foundation for the National Institutes of Health

The Genetic Association Information Network (GAIN) is a public-private partnership whose goal is to stimulate research to understand the complex contributions of genes to human health and disease. The Genetic Association Information Network will be managed by the Foundation for the National Institutes of Health (FNIH) and includes the National Institutes of Health (NIH) and private-sector partners. This Notice announces, on behalf of the FNIH and its partners, an opportunity for investigators from the worldwide research community to nominate studies to participate in GAIN.

GAIN will genotype samples from existing case-control studies of common diseases to provide data for whole genome association studies. The samples for this study have not been identified yet, so the purpose of this Notice is to advise investigators that they may nominate appropriate sets of samples, and the associated phenotype and exposure data, from existing studies. As GAIN will be funding the genotyping, there will be no cost to those investigators who contribute samples. The resulting genotype data, as well as the phenotype and exposure data, will be made available, at no cost, to the entire scientific community for analysis through a central database managed by the National Center for Biotechnology Information at the NIH National Library of Medicine. All of the data will be released as rapidly as possible, with appropriate policies and procedures in place to maintain the privacy of participants in the original studies, ensure data quality, and recognize the intellectual contributions of the researchers contributing study data to GAIN. The opportunity for broad analysis of the resulting datasets is intended to facilitate the identification of the genetic pathways underlying individual susceptibility to these diseases and to highlight new molecular targets for prevention, diagnosis, and treatment. For more information, please see:

<http://grants1.nih.gov/grants/guide/notice-files/NOT-HG-06-009.html>

Neurotechnology Research, Development, and Enhancement (R21) (PA-06-278)

NINDS and multiple NIH Components

Application Receipt/Submission Date(s): Multiple dates, see announcement.

<http://grants.nih.gov/grants/guide/pa-files/PA-06-278.html>

Neurotechnology Research, Development, And Enhancement (R01) (PA-06-279)

NINDS and multiple NIH Components

Application Receipt/Submission Date(s): Multiple dates, see announcement.

<http://grants.nih.gov/grants/guide/pa-files/PA-06-279.html>

Collaborative Research in Stem Cell Biology (R21) (PAS-06-264)

National Institute of Neurological Disorders and Stroke

Application Receipt/Submission Date(s): Multiple dates, see announcement

<http://grants.nih.gov/grants/guide/pa-files/PAS-06-264.html>

Small Grants Program for Cancer Epidemiology (R03) (PAR-06-294)

National Cancer Institute

Application Receipt/Submission Date(s): July 20, 2006; November 20, 2006; March 20, 2007; July 20, 2007; November 20, 2007; March 20, 2008; July 21, 2008; November 21, 2008.

<http://grants.nih.gov/grants/guide/pa-files/PAR-06-294.html>

Behavioral Science Track Award for Rapid Transition (B/START) (R03) (PAR-06-300)

National Institute on Drug Abuse

Application Receipt/Submission Date(s): Multiple dates, see announcement.

<http://grants.nih.gov/grants/guide/pa-files/PA-06-300.html>

Imaging - Science Track Award for Research Transition (I/START) [R03] (PAR-06-311)

National Institute on Drug Abuse

Application Receipt/Submission Date(s): Multiple dates, see announcement.

<http://grants.nih.gov/grants/guide/pa-files/PA-06-311.html>

Clinical Trial Methods In Neurology (NOT-NS-06-007)

National Institute of Neurological Disorders and Stroke

<http://grants.nih.gov/grants/guide/notice-files/NOT-NS-06-007.html>

Request for Information (RFI): Policy Comments on data sharing for the National Database for Autism Research (NDAR) (NOT-MH-06-107)

National Institute of Mental Health

National Institute on Drug Abuse

National Institute on Deafness and Other Communication Disorders

National Institute of Environmental Health Sciences

National Institute of Neurological Disorders and Stroke

<http://grants.nih.gov/grants/guide/notice-files/NOT-MH-06-107.html>

Notice to Announce Availability of Biomaterials, Phenotyping Information, and Genotyping Data from the NIMH Genetics Initiative for Whole Genome Association Studies (NOT-MH-06-108)

National Institute of Mental Health

<http://grants.nih.gov/grants/guide/notice-files/NOT-MH-06-108.html>

Basic and Preclinical Research on Complementary and Alternative Medicine (CAM) [R21] (PA-06-315)

National Center for Complementary and Alternative Medicine

National Cancer Institute

Office of Dietary Supplements

Application Receipt/Submission Date(s): Multiple dates, see announcement

<http://grants.nih.gov/grants/guide/pa-files/PA-06-315.html>

Probiotics for Pediatric Illnesses (R21) (PA-06-316)

National Center for Complementary and Alternative Medicine

Office of Dietary Supplements

Application Receipt/Submission Date(s): Multiple dates, see announcement

<http://grants.nih.gov/grants/guide/pa-files/PA-06-316.html>

Cross-Disciplinary Translational Research At NIH (R21) (PA-06-321)

National Institute on Drug Abuse

National Cancer Institute

Application Receipt/Submission Date(s): Multiple dates, see announcement

<http://grants.nih.gov/grants/guide/pa-files/PA-06-321.html>

Cross-Disciplinary Translational Research At NIH (R03) (PA-06-322)

National Institute on Drug Abuse

National Cancer Institute

Application Receipt/Submission Date(s): Multiple dates, see announcement

<http://grants.nih.gov/grants/guide/pa-files/PA-06-322.html>

Psychopharmacology Of Widely Available Psychoactive Natural Products (R03) (PA-06-323)

National Institute on Drug Abuse
National Institute of Mental Health
Office of Dietary Supplements

Application Receipt/Submission Date(s): Multiple dates, see announcement

<http://grants.nih.gov/grants/guide/pa-files/PA-06-323.html>

Research On Adherence To Interventions For Mental Disorders (R01) (PA-06-324)

National Institute of Mental Health

Application Receipt/Submission Date(s): Multiple Dates, see announcement

<http://grants.nih.gov/grants/guide/pa-files/PA-06-324.html>

RESEARCH RESOURCES

TSC1 Knockout Mice Available from Jackson Laboratories The TSC1 knockout mice (Stock # 005680 STOCK Tsc1<tm1Djk>/J) will be available for sale on April 24, 2006. The colony is sized to accommodate orders of approximately 6-10 mice, however larger quantities can be arranged. Please contact Jackson Laboratories with your animal needs as this information will help them with colony planning. Please note: if there are few requests for this strain they will not continue to maintain a live colony. The strain would then be available from the Cryopreservation Repository and subject to a cryo recovery fee. Thus, if you need mice you are encouraged to order them now. Pricing information is as follows:

Individual animals: homozygotes at a price of \$146.00

Pairs supplied as homozygote x homozygote at a price of \$292.00

There is no available control for this strain.

TO PLACE AN ORDER: please instruct your purchasing department to fax your order directly to: Maggie Hanscom, Customer Service Representative, at 207-288-6150.

LICENSING AND TECHNICAL INFORMATION: please refer to the strain data sheet at:

<http://jaxmice.jax.org/strain/005680.html>

NEW ACCOUNT APPLICATION: If you do not currently have an account with The Jackson Laboratory please complete the on-line application which will facilitate the placement of your order at: <http://jaxmice.jax.org/orders/newcustomer.html>

NEW TSC PUBLICATIONS

Avila NA, Dwyer AJ, Rabel A, Decastro RM, Moss J (2006) CT of Pleural Abnormalities in Lymphangiomyomatosis and Comparison of Pleural Findings After Different Types of Pleurodesis. AJR Am J Roentgenol 186(4):1007-12

Becker AJ, Blumcke I, Urbach H, Hans V, Majores M (2006) Molecular neuropathology of epilepsy-associated glioneuronal malformations. J Neuropathol Exp Neurol 65(2):99-108

Butnor KJ, Guinee DG Jr (2006) Pleuropulmonary Pathology of Birt-Hogg-Dube Syndrome. Am J Surg Pathol 30(3):395-399

- Choi JE, Chae JH, Hwang YS, Kim KJ (2006) Mutational analysis of TSC1 and TSC2 in Korean patients with tuberous sclerosis complex. *Brain Dev* 2006 Mar 20 [Epub ahead of print]
- Coffey VG, Zhong Z, Shield A, Canny BJ, Chibalin AV, Zierath JR, Hawley JA (2006) Early signaling responses to divergent exercise stimuli in skeletal muscle from well-trained humans. *FASEB J* 20(1):190-2; Epub 2005 Nov 2
- Collins JJ, Tudor C, Leonard JM, Chuck G, Franz DN (2006) Levetiracetam as adjunctive antiepileptic therapy for patients with tuberous sclerosis complex: a retrospective open-label trial. *J Child Neurol* 21(1):53-7
- Curatolo P, Bombardieri R, Cerminara C (2006) Current management for epilepsy in tuberous sclerosis complex. *Curr Opin Neurol* 19(2):119-123
- Hansen LK, Rasmussen NH (2006)[Treatment of infantile spasms.] *Ugeskr Laeger* 168(14):1424-1428 [Article in Danish]
- Jozwiak J, Wlodarski P (2006) Hamartin and tuberin modulate gene transcription via beta-catenin. *J Neurooncol* 2006 Mar 22 [Epub ahead of print]
- Jurkiewicz E, Jozwiak S, Bekiesinska-Figatowska M, Pakula-Kosciesza I, Walecki J (2006) Cyst-like cortical tubers in patients with tuberous sclerosis complex: MR imaging with the FLAIR sequence. *Pediatr Radiol* 2006 Mar 28 [Epub ahead of print]
- Kamiya H, Shinoda K, Kobayashi N, Kudo K, Nomura T, Morita T, Fujii T (2006) Tuberous sclerosis complex complicated by pulmonary multinodular shadows. *Intern Med* 45(5):275-8 Epub 2006 Apr 3
- Karim A, Taha I, Laghmari M, Mohcine Z (2006) Bourneville tuberous sclerosis: various clinical manifestations.] *J Fr Ophtalmol* 29(3):338-9 [Article in French]
- Kombogiorgas D, St George EJ, Chapman S, English M, Solanki GA (2006) Infantile clivus chordoma without clivus involvement: case report and review of the literature. *Childs Nerv Syst* 2006 Mar 25 [Epub ahead of print]
- Liu H, Radisky DC, Nelson CM, Zhang H, Fata JE, Roth RA, Bissell MJ (2006) Mechanism of Akt1 inhibition of breast cancer cell invasion reveals a protumorigenic role for TSC2. *Proc Natl Acad Sci U S A* 2006 Mar 14;103(11):4134-9; Epub 2006 Mar 7
- Malgorzata S, Maria KK, Jan K (2005) Pulmonary disease in patients with tuberous sclerosis.] *Pneumonol Alergol Pol* 73(1):48-56 [Article in Polish]
- Mennel S, Hausmann N, Meyer CH, Peter S (2006) Photodynamic therapy for exudative hamartoma in tuberous sclerosis. *Arch Ophthalmol* 124(4):597-9
- Proud CG (2006) Regulation of protein synthesis by insulin. *Biochem Soc Trans* 34(Pt 2):213-6
- Ridler K, Suckling J, Higgins NJ, de Vries PJ, Stephenson CM, Bolton PF, Bullmore ET (2006) Neuroanatomical Correlates of Memory Deficits in Tuberous Sclerosis Complex. *Cereb Cortex* 2006 Apr 7 [Epub ahead of print]
- Robb VA, Astrinidis A, Henske EP (2006) Frequent of ribosomal protein S6 hyperphosphorylation in lymphangioliomyomatosis-associated angiomyolipomas. *Mod Pathol* 2006 Mar 31 [Epub ahead of print]

Roccio M, Bos JL, Zwartkruis FJ (2006) Regulation of the small GTPase Rheb by amino acids. *Oncogene* 25(5):657-64

Shillingford JM, Murcia NS, Larson CH, Low SH, Hedgepeth R, Brown N, Flask CA, Novick AC, Goldfarb DA, Kramer-Zucker A, Walz G, Piontek KB, Germino GG, Weimbs T (2006) From the Cover: The mTOR pathway is regulated by polycystin-1, and its inhibition reverses renal cystogenesis in polycystic kidney disease. *Proc Natl Acad Sci U S A* 103(14):5466-71 Epub 2006 Mar 27

Sutter R, Boehler A, Willmann JK (2006) Adrenal angiomyolipoma in lymphangiomyomatosis. *Eur Radiol* 2006 Apr 4 [Epub ahead of print]

Villmanya F, Placer J, Pou Serradell A, Cortadellas R, Gelabert-Mas A (2006) Tuberous sclerosis complex. Forty-years of follow-up of a patient affected. *Arch Esp Urol* 59(1):105-7

Woerner AC, Au KS, Williams AT, Harris PC, Northrup H (2006) Tuberous sclerosis complex and polycystic kidney disease together: An exception to the contiguous gene syndrome. *Genet Med* 8(3):197-198

Wong V, Khong PL (2006) Tuberous sclerosis complex: correlation of magnetic resonance imaging (MRI) findings with comorbidities. *J Child Neurol* ;21(2):99-105

Zhou X, Zhu J, Liu KY, Sabatini BL, Wong ST (2006) Mutual information-based feature selection in studying perturbation of dendritic structure caused by TSC2 inactivation. *Neuroinformatics* 4(1):81-94

CONFERENCES

May 11-12, 2006

Nutrient Sensing, Insulin Signaling and Hamartoma Syndromes

Lister Hall, National Institutes of Health, Bethesda, MD

Information: <http://www.niddk.nih.gov/fund/other/nutrientsensing/index.htm>

May 20-25, 2006

American Psychiatric Association: From Science to Public Policy

Toronto, Canada

www.psych.org

June 4-7, 2006

Genomics & Public Health

4th International DNA Sampling Conference

Omni Hotel, Montreal, Canada

Information: www.humgen.umontreal.ca/events/dnasampling

June 11-16, 2006

Trainer-of-Trainers Conference: Survival Skills and Ethics

Snowmass, CO

This conference It will provide education faculty and administrators with the keys to establishing or improving instruction in the responsible conduct of research. For details or access to an application form, please visit www.survival.pitt.edu/events/trainer.asp Conference participants will receive an extensive set of lecture outlines, ethics cases, student handouts, readings, slides, and a comprehensive bibliography.

June 15-17, 2006

American Epilepsy Society Mid-Year Meeting

Oak Brook, IL

www.aesnet.org

June 25 – 30, 2006

International Conference on Complex Systems (ICCS)

Boston, MA

Go to www.necsi.org/events/iccs6/ for details.

July 1-5, 2006

Lecture Course on Molecular and Cellular Cognition

Venice, Italy, July 1–5, 2006.

Sixty PhD students and postdoctoral fellows will be selected to participate. Discussion will be on various aspects of molecular and cellular events underlying cognition, emotion, and related neuropsychiatric diseases. For more information or to register, please visit www.molcellcog.org

July 2-6, 2006

7th European Congress of Epileptology

Helsinki Fair Centre, Helsinki, Finland

<http://www.epilepsyhelsinki2006.org>

July 8-12, 2006

5th Forum of European Neuroscience

Austria Center Vienna, Austria

<http://www.fens.org>

July 8-12, 2006

UICC World Cancer Congress 2006

Washington Convention Center, Washington, DC

<http://www.2006conferences.org/u-program.php>

July 14-16, 2006

National TSC Conference

Organized by the Tuberous Sclerosis Alliance

[Indian Lakes Resort](http://www.indianlakesresort.com)

Chicago, Illinois

<http://www.tsalliance.org>

July 27-30, 2006

6th Asian & Oceanian Epilepsy Congress

Kuala Lumpur Convention Centre

Kuala Lumpur, Malaysia

www.epilepsykualalumpur2006.org

August 2-4, 2006

10th European Conference on Epilepsy & Society

Copenhagen, Denmark

For more information: <http://www.epilepsyandsociety.org>

August 6-10, 2006

11th International Congress of Human Genetics

Brisbane, Australia

<http://www.ichg2006.com>

August 6-11, 2006

Gordon Research Conference on Mechanisms of Epilepsy and Neuronal Synchronization

Colby College, Waterville, Maine

For conference program and application form, see

<http://www.grc.uri.edu/programs/2006/epilepsy.htm> Note that conference attendance is strictly limited, therefore, early application is highly recommended. Poster presentations are key and popular aspects of Gordon conferences, and poster information is to be included in the application form. Women and minorities are especially encouraged to apply. Some travel assistance to students, postdocs and minorities will be available based on need.

Did you know that The GRC has limited funds available through the **Carl Storm Underrepresented Minority Fellowship program** to support the participation of eligible minority students, faculty and scientists at Gordon Research Conferences during 2006? Please follow [this link](#) to learn more about, and apply for this program.

In some cases, the above link may not work. If you have trouble please copy and paste the following link into your web browser.

<https://www.grc.org/csf/CSF1.asp?id=1445316>

September 6-9, 2006

4th Latin American Congress on Epilepsy 2006

Guatemala City, Guatemala

<http://www.epilepsyguatemala2006.org>

September 10-14, 2006

XXVIIIth International Congress of Clinical Neurophysiology

Edinburgh, UK

www.iccn2006.com

October 6-11, 2006

Plastic Surgery 2006

San Francisco, CA

www.plasticsurgery.org/annual_meeting

October 7-10, 2006

19th Annual ISONG Conference: Genomic Health Care: The Future is Now

Bourbon Orleans Hotel, New Orleans, LA

For more information: www.isong.org

October 30 – November 2, 2006

World Congress on Autism

Cape Town, South Africa

Call for Papers closes 30th September 2005

Early Bird Registration Closes June 30th 2006

Please visit www.autismcongress.com

December 1-5, 2006

2006 AES Annual Meeting/North American Regional Epilepsy Congress

San Diego Convention Center

Abstract submissions accepted March 6 – June 5, 2006

For more information: <http://www.aesnet.org/Visitors/AnnualMeeting/index.cfm>

March 28-30, 2007

NINDS Epilepsy Conference

Bethesda, MD

Follow-up to 2000 Conference "Curing Epilepsy: Focus on the Future"

<http://www.ninds.nih.gov>

April 19-22, 2007

2007 LAM International Research Conference

The LAM Foundation
Cincinnati, OH
<http://>

May 18-21, 2007

20th Annual ISONG Conference: Global Issues in Genomic Healthcare

Marriott Bristol City Centre, Bristol, England
For more information: www.isong.org

July 8-12, 2007

27th International Epilepsy Congress

Suntec Singapore International Convention and Exhibition Center
Singapore
For more information: www.epilepsycongress.org

September 2007 (Dates TBD)

International Tuberous Sclerosis Complex Research Conference

Washington, DC Metro Area
More information coming soon!

NEWS

Researchers Target Cancer Stem Cells' Unique Vulnerability New research indicates there is a useful difference between cells that keep the blood system healthy and the stem cells that make leukemia lethal. Discovery of the difference is important, because experiments in mice now show that the stem cells promoting leukemia can be killed by rapamycin, a drug that has already received Food and Drug Administration (FDA) approval. This research by Sean J. Morrison, Ph.D., HHMI investigator at the University of Michigan Medical School, was published in the April 05, 2006, issue of Nature. For the full story, go to: <http://www.hhmi.org/news/morrison20060405.html>

Consortium of Epilepsy Groups Launches Web Site The American Epilepsy Society, together with several advocacy groups including the Tuberous Sclerosis Alliance, has launched a new Web site for epilepsy researchers. This Web site provides information about funding opportunity and lists of currently funded epilepsy research grants. The URL for direct access to the Resources in Epilepsy Research pages within the AES web site is <http://epilepsyresearchresource.org>

Tuberous Sclerosis Complex Research Program (TSCR) Highlights The Department of Defense TSCR has posted several research highlights from TSC-funded research. The URLs for these highlights are below:

Tuberin Regulates mTOR Function in Response to Hypoxia

Posted April 3, 2006

William Kaelin, Jr., M.D., Dana-Farber Cancer Institute, Boston, Massachusetts
Funded by the Department of Defense Tuberous Sclerosis Complex Research Program
<http://cdmrp.army.mil/highlights/default.htm#9>

Elucidating the Functions of the TSC1 and TSC2 Genes

Posted November 10, 2005

Elizabeth Henske, M.D., Fox Chase Cancer Center, Philadelphia, Pennsylvania
<http://cdmrp.army.mil/highlights/2005.htm#24>

Understanding the Causes of TSC-Related Epilepsy

Posted October 13, 2005

David H. Gutmann, Ph.D., Washington University School of Medicine, St. Louis Missouri
<http://cdmrp.army.mil/highlights/2005.htm#20>

Secretary's Advisory Committee on Genetics, Health, and Society Releases Report on Coverage and Reimbursement of Genetic Tests and Services The Final SACGHS Report on Coverage and Reimbursement of Genetic Tests and Services is now available at
http://www4.od.nih.gov/oba/sacghs/reports/CR_report.pdf

The report describes the current state of coverage and reimbursement of genetic tests and services, highlights how problems in the system are affecting patient access to and utilization of health-related genetic tests and services, and identifies nine steps for improving current mechanisms for coverage and reimbursement of genetic tests and services in both public and private sectors. The recommendations cover a range of topics, including evidence-based coverage decision-making, Medicare coverage of preventive services, the adequacy of Current Procedural Terminology codes for genetic tests and services, billing by non-physician genetic counseling providers, and genetics education of health providers.

Dr. Reed Tuckson, SACGHS Chair, remarked that the changes recommended in the report "are critical to the integration of genetic tests and services into the health care system. Implementation of the recommended changes will help the Department of Health and Human Services fulfill its mission to improve the health and well-being of Americans." Although the Committee's recommendations are directed primarily to the Secretary of Health and Human Services, many also are relevant to private health insurance plans. Dr. Tuckson noted that "adoption of the recommendations by the private sector will help to ensure that individuals with private insurance also benefit from improved access to genetic tests and services."

SACGHS was established in 2002 to assess the broad range of human health and societal issues raised by the development and use, and potential misuse, of genetic technologies. SACGHS is composed of 13 non-governmental national experts in a range of scientific and professional disciplines as well as 19 non-voting ex officio representatives from a number of HHS agencies and offices and other components of the Executive Branch. More information about SACGHS is available at
<http://www4.od.nih.gov/oba/SACGHS.htm>

Incredible Opportunity Leads to Discovery of Neurons that Detect Novel Objects A rare opportunity to study patients with an intractable form of epilepsy has led to the identification of specific neurons in the human brain that respond to novel or familiar objects. The discovery was made using micro-thin electrodes that read electrical activity from single neurons inside the brains of patients who were undergoing treatment to determine the origin of their epileptic seizures. The research by Howard Hughes Medical Institute scientist Erin M. Schuman, Ph.D. at California Institute of Technology, and their colleagues may help researchers understand how the human brain distinguishes new objects from more familiar objects, a skill crucial to survival. This research was published in the March 16, 2006, issue of *Neuron*. For the full story, go to:
<http://www.hhmi.org//news/schuman20060316.html>

Sea Coral's Trick Helps Scientists Tag Proteins A new color-changing tag based on the light produced by a variety of sea coral could help scientists follow individual proteins inside living cells. The tag, called Dendra, was created by Sergey Lukyanov, Ph.D., HHMI international scholar at the Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, and his coworkers. It is small enough to highlight proteins without interfering with their folding or function. It also is the first green-to-red fluorescent marker that can be activated by visible blue light. This

research was published in the March 19, 2006, issue of Nature Biotechnology. For the full story, go to: <http://www.hhmi.org//news/lukyanov20060319.html>

New Information on the NIMH Web Site:

Cortex Matures Faster in Youth with Highest IQ
<http://www.nimh.nih.gov/press/youthcortexiq.cfm>

New Strategies Help Depressed Patients Become Symptom-Free
<http://www.nimh.nih.gov/press/stard2.cfm>

Aggression-Related Gene Weakens Brain's Impulse Control Circuits
<http://www.nimh.nih.gov/press/maocircuits.cfm>

Maintenance Treatment Prevents Recurrence in Older Adults with Single-Episode Depressions
<http://www.nimh.nih.gov/press/depressionmeds.cfm>

Gene Influences Antidepressant Response
<http://www.nimh.nih.gov/press/stardgene.cfm>

Primary Results for Sequenced Treatment Alternatives to Relieve Depression (STAR*D) Study - Level 2 Results
<http://www.nimh.nih.gov/healthinformation/stard.cfm>

Questions and Answers about the NIMH Sequenced Treatment Alternatives to Relieve Depression (STAR*D) Study - Level 2 results, published in New England Journal of Medicine, March 23, 2006
http://www.nimh.nih.gov/healthinformation/stard_ga_level2.cfm

EMPLOYMENT OPPORTUNITIES

National Institutes of Arthritis, Musculoskeletal and Skin Disease

NIAMS has two vacancies in the Office of Science Policy and Planning for two Science Policy Analysts (GS-13/14 level, 601 series) to work on a wide range of policy, planning, and evaluation activities.

One of these positions will manage a portfolio related to rheumatic and skin diseases, structure and function, and the other position will manage a portfolio related to musculoskeletal and muscle diseases, structure and function. Experience equivalent to a Master's degree or higher is optimal, but not required. Applications are due by May 2nd.

<http://jobsearch.usajobs.opm.gov/getjob.asp?JobID=41477733>



THE ROTHBERG INSTITUTE
For childhood diseases



The Rothberg Institute for Childhood Diseases is a non-profit research institution devoted to discovering, developing and delivering to patients novel chemical and biological therapies for the treatment of Tuberous Sclerosis and other childhood diseases. We are applying innovative drug discovery strategies and operate at the intersection of molecular biology, chemistry, and nanotechnology. We are located on the picturesque Connecticut shoreline in Guilford, CT.

Postdoc – Antibody Engineering Job code 06-01

We seek an individual to generate and evolve single chain antibody libraries utilizing in vitro transcription translation (IVT) in microdroplets. The focus is on developing antibody therapeutics for life threatening conditions associated with Tuberous Sclerosis Complex. This is a unique opportunity to leverage new microfluidic technologies being developed with the help of three Nobel laureates. Experience with antibody engineering, IVT and molecular biology techniques is required. The candidate must hold a Ph.D. in biochemistry or biophysics.

microfluidics being developed with the help of three Nobel laureates. Prior synthetic experience in the aqueous phase and the synthesis of large combinatorial libraries is required. The candidate must hold a Ph.D. in synthetic organic chemistry.

Views from the Rothberg Institute



Postdoc – Cell and Animal Models Job code 06-02

The focus is on developing animal models from TSC cell lines and to utilize the piggyBac transposon technology developed in the laboratories of Prof. Tian Xu at Yale University to screen for transforming mutations specific to Tuberous Sclerosis Complex (Cell, Vol. 122, 473-483). The work will be conducted in collaboration with Prof. Tian Xu at Yale Medical School and requires experience with mammalian cell culture, animal handling and advanced molecular biology techniques. Experience with generating and using transgenic or nude mouse animal models in drug development required. The candidate must hold a Ph.D.

Postdoc – High-throughput screening of drug combinations Job code 06-04

The focus is on screening existing drugs in pair-wise combinations against TSC cell lines utilizing robotic platforms and droplet-based microfluidic technologies. This is a unique opportunity to leverage microfluidic technologies being developed with the help of three Nobel laureates. The candidate must hold a Ph.D or engineering degree. Prior high-throughput screening, Mammalian cell culture and robotic or microfluidic liquid handling experience is required.

Postdoc – Combinatorial Chemistry Job code 06-03

We seek an individual to design, synthesize and characterize combinatorial libraries in aqueous media to support high-throughput screening. The focus is on developing small molecule leads for life threatening conditions associated with Tuberous Sclerosis Complex. This is a unique opportunity to leverage new

While our location offers panoramic views of Long Island Sound and the town marina, our facility is state of the art. TRI employees enjoy a rare opportunity to network with leading scientists, institutions and physicians in discovering and developing cures for childhood diseases – all within 20 minutes of Yale University and New Haven.

Please send your resume, indicating Job code to:
Human Resources
jobs@childhooddiseases.org

We offer a highly competitive compensation and benefits package. An equal opportunity employer
Visit our website @ www.childhooddiseases.org

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TSC INFORMATION

For information about TSC, visit the TS Alliance Web site at: <http://www.tsalliance.org> or contact the TS Alliance at info@tsalliance.org or by telephone: 1-800-225-6872 or 301-562-9890.