



TSC ALERT

Edited by Vicky H Whittemore, PhD

May 2005

Welcome to the May 2005 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 June 2005 *TSC Alert* contact: Vicky.Whittemore@tsalliance.org

Table of Contents

[Clicking on one of the headings takes you directly to that section of TSC Alert]

GRANT ANNOUNCEMENTS.....	1
NEW TSC PUBLICATIONS	3
CONFERENCES	5
NEWS	7
TSC INFORMATION.....	8

GRANT ANNOUNCEMENTS

NIH RELEASES TUBEROUS SCLEROSIS COMPLEX PROGRAM ANNOUNCEMENT

The TS Alliance is pleased to announce the release of the National Institutes of Health (NIH) Program Announcement with set-aside funds (PAS) entitled "Understanding and Treating Tuberous Sclerosis Complex." This is a joint Program Announcement with NIH and the TS Alliance. The participating organizations intend to commit a total of approximately \$2 million to this PAS in addition to funds available for applications sent in response to this initiative that score within the paylines of the participating NIH Institutes, which include:

[National Institute of Neurological Disorders and Stroke \(NINDS\)](#)

[National Institute of Diabetes and Digestive and Kidney Diseases \(NIDDK\)](#)

[National Institute of Mental Health \(NIMH\)](#)

[National Institute of Arthritis and Musculoskeletal and Skin Diseases \(NIAMS\)](#)

[National Cancer Institute \(NCI\)](#)

**THE EPILEPSY RESEARCH FOUNDATION
NEW THERAPY GRANTS PROGRAM**

The Epilepsy Research Foundation, a joint initiative of The Epilepsy Project and the Epilepsy Foundation, is requesting proposals for its New Therapy Grants Program. The deadlines for submission are **April 1 and October 1, 2005**. Please visit www.epilepsyproject.org/grants for more information.

CURE

CURE, Citizens United for Research in Epilepsy, is requesting proposals for its 2006 Research Program. Deadline is **June 30, 2005**. Please visit www.CUREepilepsy.org.

PARENTS AGAINST CHILDHOOD EPILEPSY, INC. (PACE)

PACE, a research and education fund, will consider grant applications for innovative research to encourage investigation into the causes and cures of seizure disorders in children. The primary areas of research we are interested in stimulating are:

- Innovative pediatric models of epilepsy
- Electrophysiologic recording on live human tissue from epilepsy surgery
- Evaluation of neocortical epilepsies
- The role of immune or inflammatory mediators in epilepsy
- Neuro-immunological effects of inflammatory molecules with the emphasis on dietary pathogens
- Other innovative proposals that fall outside the above areas that address pediatric epilepsy will be considered including quality of life.

Send for the two page screening application and file the application by **September 15, 2005**. You can reach us online at www.PACEUSA.org, by email: pacenyemai@aol.com, by fax: 212.327.3075 or by phone 212.665.PACE (7223).

**COLLABORATIVE AWARDS IN EPILEPSY RESEARCH FOR JUNIOR INVESTIGATORS
(PA-05-095)**

National Institute of Neurological Disorders and Stroke

National Institute on Aging

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

<http://grants.nih.gov/grants/guide/pa-files/PA-05-095.html>

DEVELOPMENT OF DISEASE BIOMARKERS (PA-05-098)

National Institute of Diabetes and Digestive and Kidney Diseases

National Institute on Alcohol Abuse and Alcoholism

National Institute of Biomedical Imaging and Engineering

Office of Dietary Supplements

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

<http://grants.nih.gov/grants/guide/pa-files/PA-05-098.html>

PILOT AND FEASIBILITY PROGRAM RELATED TO THE KIDNEY (PA-05-103)

National Institute of Diabetes and Digestive and Kidney Diseases

National Cancer Institute

National Heart, Lung, and Blood Institute

National Institute on Aging

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

<http://grants.nih.gov/grants/guide/pa-files/PA-05-103.html>

BRAIN DISORDERS IN THE DEVELOPING WORLD: RESEARCH ACROSS THE LIFESPAN (PAR-05-100)

John E. Fogarty International Center
Canadian Institutes of Health Research
National Eye Institute
National Institute on Aging
National Institute on Alcohol Abuse and Alcoholism
National Institute of Child Health and Human Development
National Institute on Drug Abuse
National Institute of Environmental Health Sciences
National Institute of Mental Health
National Institute of Neurological Disorders and Stroke
Office of Dietary Supplements
National Association for Autism Research
Application Receipt Date(s): Multiple dates, see announcement.
<http://grants.nih.gov/grants/guide/pa-files/PA-05-100.html>

**RUTH L. KIRSCHSTEIN NATIONAL RESEARCH SERVICE AWARD (NRSA)
INSTITUTIONAL DENTAL RESEARCH TRAINING PROGRAM (PAR-05-101)**

National Institute of Dental and Craniofacial Research
Application Receipt Date(s): September 10, 2005 , 2006, 2007
<http://grants.nih.gov/grants/guide/pa-files/PA-05-101.html>

NEW TSC PUBLICATIONS

New TSC Publications:

Berg IE (2005) Tuberous sclerosis complex. *J Contin Educ Nurs* 36(2):53-4

Bikopoulos G, Ceddia RB, Sweeney G, Hilliker AJ (2004) Insulin reduces apoptosis and increases DNA synthesis and cell size via distinct signalling pathways in *Drosophila* Kc cells. *Cell Prolif* 37(4):307-16

Biraben A, Beauplet A (2005) [Therapeutic strategy in epileptic patients.] *Rev Prat* 55(3):271-83 [Article in French]

Cabrera Duro A, Rodrigo Carbonero D, Aramendi Gallardo J, Pastor Menchaca E, Galdeano Miranda J, Hermana Tenzanos T, Prats Vinas J (2005) [Tuberous sclerosis associated with rhabdomyoma in the left ventricular outlet tract.] *An Pediatr (Barc)* 62(4):367-9 [Article in Spanish]

Diaconu G, Grigore I, Burlea M, Chirakis N, Lupu VV (2004)[Neurocutaneous syndromes and epilepsy. 23 cases report and literature review.] *Rev Med Chir Soc Med Nat Iasi* 108(3):575-9 [Article in Romanian]

Ess KC, Kamp CA, Tu BP, Gutmann DH (2005) Developmental origin of subependymal giant cell astrocytoma in tuberous sclerosis complex. *Neurology* 64(8):1446-9

- Henske EP (2005) Tuberous sclerosis and the kidney: from mesenchyme to epithelium, and beyond. *Pediatr Nephrol* 2005 Apr 26 [Epub ahead of print]
- Jones RG, Plas DR, Kubek S, Buzzai M, Mu J, Xu Y, Birnbaum MJ, Thompson CB (2005) AMP-Activated Protein Kinase Induces a p53-Dependent Metabolic Checkpoint. *Mol Cell* 18(3):283-93
- Kapahi P, Zid BM, Harper T, Koslover D, Sapin V, Benzer S (2004) Regulation of lifespan in *Drosophila* by modulation of genes in the TOR signaling pathway. *Curr Biol* 14(10):885-90
- Kesari S, Ramakrishna N, Sauvageot C, Stiles CD, Wen PY (2005) Targeted Molecular Therapy of Malignant Gliomas. *Curr Neurol Neurosci Rep* 5(3):186-197
- Kimura Y, Sugimura H, Toda M, Nakamura Y, Shibuya K, Murakami A, Wakita S, Yanagawa Y, Kato H (2005) A case of 2-year-old boy with tuberous sclerosis complicated with descending aortic aneurysm. *Pediatr Int* 47(2):224-6
- Kobayashi T, Satoh K, Ohkawa M (2005) Multifocal micronodular pneumocyte hyperplasia associated with tuberous sclerosis. *Acta Radiol* 46(1):37-40
- Kremer S, Schmitt E, Klein O, Vignal JP, Moret C, Kahane P, Arzimanoglou A (2005) Leptomeningeal enhancement and enlarged choroid plexus simulating the appearance of sturge-weber disease in a child with tuberous sclerosis. *Epilepsia*. 2005 Apr;46(4):595-6
- Long X, Lin Y, Ortiz-Vega S, Yonezawa K, Avruch J (2005) Rheb Binds and Regulates the mTOR Kinase. *Curr Biol* 15(8):702-13
- Ma L, Chen Z, Erdjument-Bromage H, Tempst P, Pandolfi PP (2005) Phosphorylation and Functional Inactivation of TSC2 by Erk Implications for Tuberous Sclerosis and Cancer Pathogenesis. *Cell* 121(2):179-193
- Ma L, Kowalski D, Javed K, Hui P (2005) Atypical angiomyolipoma of kidney in a patient with tuberous sclerosis: a case report with p53 gene mutation analysis. *Arch Pathol Lab Med* 129(5):676-9
- McDorman KS, Pachkowski BF, Nakamura J, Wolf DC, Swenberg JA (2005) Oxidative DNA damage from potassium bromate exposure in Long-Evans rats is not enhanced by a mixture of drinking water disinfection by-products. *Chem Biol Interact* 152(2-3):107-17
- Minz M, Sharma A, Mahawar K, Heer M, Kashyap R (2005) Successful live related renal transplant in a case of tuberous sclerosis. *J Assoc Physicians India* 53:43-5
- Niku S, Stark P, Levin DL, Friedman PJ (2005) Lymphangiomyomatosis: clinical, pathologic, and radiologic manifestations. *J Thorac Imaging* 20(2):98-102
- Nobukini T, Thomas G (2004) The mTOR/S6K signalling pathway: the role of the TSC1/2 tumour suppressor complex and the proto-oncogene Rheb. *Novartis Found Symp* 262:148-54; discussion 154-9, 265-8
- Rok P, Kasprzyk-Obara J, Domanska-Pakiela D, Jozwiak S (2005) Clinical symptoms of tuberous sclerosis complex in patients with an identical TSC2 mutation. *Med Sci Monit*. 2005 Apr 28 11(5):CR230-234 [Epub ahead of print]

Rutter M (2005) Aetiology of autism: findings and questions*. J Intellect Disabil Res 49(Pt 4):231-8

Sharp ZD, Bartke A (2005) Evidence for Down-Regulation of Phosphoinositide 3-Kinase/Akt/Mammalian Target of Rapamycin (PI3K/Akt/mTOR)-Dependent Translation Regulatory Signaling Pathways in Ames Dwarf Mice. J Gerontol A Biol Sci Med Sci 60(3):293-300

Wang L, Piguet AC, Schmidt K, Tordjmann T, Dufour JF (2005) Activation of CREB by tauroursodeoxycholic acid protects cholangiocytes from apoptosis induced by mTOR inhibition. Hepatology 2005 Apr 28 [Epub ahead of print]

Wen HY, Abbasi S, Kellems RE, Xia Y (2005) mTOR: A placental growth signaling sensor. Placenta 26 Suppl:S63-9

York B, Lou D, Panettieri Jr RA, Krymskaya VP, Vanaman TC, Noonan DJ (2005) Cross-talk between tuberlin, calmodulin, and estrogen signaling pathways. FASEB J 2005 Apr 25 [Epub ahead of print]

CONFERENCES

May 17 and 20, 2005

Sleep and Epilepsy in Childhood

American Epilepsy Society
TeleConsults in Epilepsy Series X
<http://www.aesnet.org>

May 20-25, 2005

International Conference of the American Thoracic Society

San Diego Convention Center
San Diego, CA
<http://www.thoracic.org>

May 23, 2005

Enhancing the Discipline of Clinical and Translational Research

Double Tree Crystal City National Airport Hotel, Arlington, VA
Sponsored by: National Center for Research Resources, National Institutes of Health
<http://grants.nih.gov/grants/guide/notice-files/NOT-RR-05-006.html>

July 5–July 15, 2005

Summer Institute in Mental Health Research

The Summer Institute in Mental Health Research is offered over the course of a two-week period, July 5–July 15, 2005, by the Department of Mental Health, Johns Hopkins Bloomberg School of Public Health. For more information about courses and enrollment, contact Adriane King at 410-955-3908 or email: aking@jhsph.edu.
http://www.jhsph.edu/Dept/MH/Summer_Institute/index.html

June 21-22, 2005

National Summit on Preconception Care

The National Center on Birth Defects and Developmental Disabilities
Marriott Century Center, Atlanta, GA

Questions should be directed to Chris Parker via email at cparker@cdc.gov or telephone at (404)498-3098

Additional information and registration:

<http://www.signup4.net/Public/ap.aspx?EID=NATI14E>

July 21-23, 2005

XXVII Annual Meeting of the Cognitive Science Society

Stresa, Italy

<http://www.psych.unito.it/csc/cogsci05/home.html>

August 28 – September 1, 2005

26th International Epilepsy Congress

Le Palais des Congres de Paris

Paris, France

<http://www.epilepsycongress.org>

September 11-14, 2005

The Second International Conference on Birth Defects and Disabilities in the Developing World

Jiuhua Spa and Resort, Beijing, China

www.chinamed.com.cn/birthdefects

October 14-18, 2005

World Congress on Psychiatric Genetics XIII: Advancing on the Pathway to Discovery

The Westin Copley Place, Boston, MA

<http://www.ispg.net>

October 18-23, 2005

American Academy of Child and Adolescent Psychiatry & Canadian Academy of Child and Adolescent Psychiatry: Joint Annual Meeting

Sheraton Centre Toronto

Toronto, Canada

<http://www.aacap.org>

December 2-6, 2005

American Epilepsy Society & American Clinical Neurophysiology Society

Washington, DC Convention Center

Washington, DC

Deadline for submission of abstracts: May 6, 2005

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

May 3-5, 2006

TSC International Research Conference 2006

Spandau, Ev. Johannesstift

Hotel "Christophorus Haus"

Berlin, Germany

<http://www.tsc2006.org>

July 2-6, 2006

7th European Congress of Epileptology

Helsinki Fair Centre, Helsinki, Finland

<http://www.epilepsyhelsinki2006.org>

SAVE THE DATE!
July 14-16, 2006
National TSC Conference
[Indian Lakes Resort](#)
Chicago, Illinois
<http://www.tsalliance.org>

NEWS

ELIZABETH PETRI HENSKE AWARDED 2005 MANUEL R. GOMEZ AWARD The Tuberous Sclerosis Alliance (TS Alliance) is pleased to announce that Elizabeth Petri Henske, M.D., has been chosen as a recipient of the TS Alliance Manuel R. Gomez Professional Recognition Award. The Gomez award recognizes individuals for outstanding achievement in improving the understanding of the genetic disorder tuberous sclerosis complex (TSC).

The annual Manuel R. Gomez Professional Recognition Award recognizes creative or pioneering efforts that have appreciably improved either the understanding of the disease or the clinical care available for individuals with tuberous sclerosis. Individuals may be nominated for the award for a recent but significant breakthrough in the understanding of the disease, or for a complete body of work during their career.

Dr. Henske began basic laboratory investigation in 1989, working with David Kwiatkowski, M.D., Ph.D. at the Brigham & Women's Hospital, Harvard Medical School, in Boston, MA. She desired a project that had relevance to human genetics and disease mechanisms, and quickly became familiar with the exploding technology in molecular genetics. Her main project was a number of studies to set the stage for the identification of TSC1 gene. This kindled what became her primary research and clinical interest.

Dr. Henske's scientific career is an example of high productivity, service to the scientific community, and devotion to tuberous sclerosis complex (TSC) and lymphangioleiomyomatosis (LAM) research. She has been a Member with Tenure at the Fox Chase Cancer Center since 2001, a rank equivalent to Professor at most universities. She received the LAM Foundation Scientific Advancement Award in 2001, recognizing her pioneering work in establishing mutation in the TSC2 gene as a critical step in the pathogenesis of LAM, firmly connecting the syndromes of TSC and LAM for the first time. She has served on more than 10 grant review panels, including as a permanent member of the NIH Cellular and Molecular Biology of the Kidney study section from 2000-2004. She has been on the Professional Advisory Board of the TS Alliance since 1997, the Scientific Advisory Board of the LAM Foundation since 1998, the Scientific Advisory Board of the Rothberg Institute for Childhood Diseases since 2001, and served as the Chair of the Integration Panel of the CDMRP Tuberous Sclerosis Research Program since 2004. She has authored 50 scientific peer-reviewed papers, the vast majority of them on TSC or LAM, and has authored 15 book chapters and review articles.

In summary, Lisa is a wonderful, genuine, caring scientist who has made enormous scientific contributions to our understanding of TSC and LAM. In addition, her personality and spirit has provided many with renewed enthusiasm in their fight against the ravages of these disorders, whether it is the continued effort to understand how these conditions develop, or figuring out a way to deal with the disorders personally on a day-to-day basis.

The \$1,000 Gomez award is made possible through generous funds contributed by Mr. and Mrs. Harold Aronson in honor of their son Peter Aronson, M.D., an individual with tuberous sclerosis and a major contributor to the mission of the Tuberous Sclerosis Alliance.

The award was originally created in honor of Manuel R. Gomez, M.D., who is known as the "father of tuberous sclerosis" and a man who has pushed the knowledge base of the disorder further than anyone else this century, while improving compassionate care for affected individuals and their families.

Previous recipients of the Manuel R. Gomez Professional Recognition Award are: Vicky Holets Whittemore, Ph.D. (2001); David Kwiatkowski, M.D., Ph.D. (2002); E. Steve Roach, M.D. (2003); and Hope Northrup, M.D. (2004).

AED UPDATE FROM THE CLINICAL THERAPEUTICS COMMITTEE OF THE AMERICAN EPILEPSY SOCIETY

Re: Trileptal (oxcarbazepine) Tablets and Oral Solution

Audience: Neuropsychiatric healthcare professionals and consumers

Novartis Pharmaceuticals and FDA notified healthcare professionals about revisions to the WARNINGS and PRECAUTIONS sections of the prescribing information for TRILEPTAL (oxcarbazepine) tablets and oral suspension, indicated for use as monotherapy or adjunctive therapy in the treatment of partial seizures in adults and children ages 4-16 years with epilepsy. The updated WARNINGS section describes serious dermatological reactions, including Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) that have been reported in both children and adults in association with Trileptal use. The PRECAUTIONS section has been updated to include language regarding multi-organ hypersensitivity reactions that have been reported in association with Trileptal use.

<http://www.fda.gov/medwatch/SAFETY/2005/safety05.htm#trileptal>

TSC INFORMATION

For information about TSC, visit the TS Alliance Web site at: <http://www.tsalliance.org> or call the Tuberous Sclerosis Alliance at 1-800-225-6872 or 301-562-9890.