



TSC ALERT

October 2007

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IMPORTANT SUBMISSION DEADLINES

Change in Deadlines for TS Alliance Research Grants Program

The TS Alliance will release the RFAs for FY08 following the TSC Conference in September 2007. The anticipated deadlines for FY08 are:

- October 2007 – Release of FY08 RFAs
- December 1, 2007 - Deadline for submission of Letter of Intent (LOI) to the TS Alliance
- January 2008 - Applicants notified of review of LOIs and invitations to submit grant applications distributed
- March 3, 2008 - Deadline for submission of grant applications
- June 2008 - Notification of grant awards
- July 1, 2008 - Earliest start date for new grant awards

FUNDING OPPORTUNITIES

FEDERAL FUNDING AGENCIES

Understanding and Treating Tuberous Sclerosis Complex (R01) (PAS-07-190)

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

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

<http://grants.nih.gov/grants/guide/pa-files/PAS-07-190.html>

Near-Term Technology Development for Genome Sequencing (R01) (RFA-HG-07-016)

National Human Genome Research Institute

Application Receipt Date(s): November 09, 2007

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-07-016.html>

Near-Term Technology Development for Genome Sequencing (R21) (RFA-HG-07-017)

National Human Genome Research Institute

Application Receipt Date(s): November 09, 2007

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-07-017.html>

Near-Term Technology Development for Genome Sequencing (SBIR [R43/R44]) (RFA-HG-07-018)

National Human Genome Research Institute

Application Receipt Date(s): November 09, 2007

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-07-018.html>

Near-Term Technology Development for Genome Sequencing (STTR [R41/R42]) (RFA-HG-07-019)

National Human Genome Research Institute

Application Receipt Date(s): November 09, 2007

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-07-019.html>

Revolutionary Genome Sequencing Technologies: " The \$1000 Genome" (R01) (RFA-HG-07-020)

National Human Genome Research Institute

Application Receipt Date(s): November 09, 2007

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-07-020.html>

Revolutionary Genome Sequencing Technologies: " The \$1000 Genome" (R21) (RFA-HG-07-021)

National Human Genome Research Institute

Application Receipt Date(s): November 09, 2007

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-07-021.html>

Revolutionary Genome Sequencing Technologies: " The \$1000 Genome" (SBIR [R43/R44]) (RFA-HG-07-022)

National Human Genome Research Institute

Application Receipt Date(s): November 09, 2007

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-07-022.html>

Revolutionary Genome Sequencing Technologies: " The \$1000 Genome" (STTR [R41/R42]) (RFA-HG-07-023)

National Human Genome Research Institute

Application Receipt Date(s): November 09, 2007

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-07-023.html>

New Technology for Proteomics and Glycomics (SBIR [R43/R44]) (PA-07-451)

National Center for Research Resources

National Heart, Lung, and Blood Institute

National Institute on Alcohol Abuse and Alcoholism

National Institute of General Medical Sciences

National Institute of Mental Health

National Institute of Neurological Disorders and Stroke

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

<http://grants.nih.gov/grants/guide/pa-files/PA-07-451.html>

New Technology for Proteomics and Glycomics (STTR [R41/R42]) (PA-07-452)

National Center for Research Resources

National Heart, Lung, and Blood Institute

National Institute on Alcohol Abuse and Alcoholism

National Institute of General Medical Sciences
National Institute of Neurological Disorders and Stroke
Application Receipt/Submission Date(s): Multiple dates, see announcement.
<http://grants.nih.gov/grants/guide/pa-files/PA-07-452.html>

Genetic and Genomic Resources for Emerging Non-Mammalian Model Organisms (R24) (PA-07-457)

National Institute of General Medical Sciences
Application Receipt/Submission Date(s): Multiple dates, see announcement.
<http://grants.nih.gov/grants/guide/pa-files/PA-07-457.html>

Technology and Methods Development for Genomics, Population Genomics and ELSI (R01) (PA-07-458)

National Human Genome Research Institute
National Institute on Deafness and Other Communication Disorders
National Institute of Dental and Craniofacial Research
National Institute of Mental Health
Application Receipt/Submission Date(s): Multiple dates, see announcement.
<http://grants.nih.gov/grants/guide/pa-files/PA-07-458.html>

Feasibility Studies to Develop Technology and Methods for Genomics, Population Genomics and ELSI (R21) (PA-07-459)

National Human Genome Research Institute
National Institute on Deafness and Other Communication Disorders
National Institute of Dental and Craniofacial Research
National Institute of Mental Health
Application Receipt/Submission Date(s): Multiple dates, see announcement.
<http://grants.nih.gov/grants/guide/pa-files/PA-07-459.html>

NINDS Diversity Research Education Grants in Neuroscience (R25) (PAR-07-456)

National Institute of Neurological Disorders and Stroke
Application Receipt/Submission Date(s): Multiple dates, see announcement.
<http://grants.nih.gov/grants/guide/pa-files/PAR-07-456.html>

Notice of Availability of Funds to Support Clinical trials on the Safety and Effectiveness of Products for Rare Diseases (NOT-FD-08-001)

Food and Drug Administration
<http://grants.nih.gov/grants/guide/notice-files/NOT-FD-08-001.html>

Other Foundation Support

PKD Foundation Translational Research Award

The PKD Foundation endeavors to stimulate and support research that will lead to new clinical interventions for the treatment of polycystic kidney disease (PKD). Traditionally the PKD Foundation pursued this goal through the support of basic laboratory research aimed at increasing the understanding of the genetic and pathological processes involved in PKD. While this still remains an important strategy, recent advances and extraordinary scientific momentum have led the Foundation to conclude that it is time to expand its funding to include those projects that will accelerate the 'translation' of the most promising basic science findings into clinical applications.

PKD Research Awards are designed to foster collaboration between basic and clinical scientists with the intent of enhancing and actively accelerating the transfer of basic PKD research findings to therapeutic interventions. Suggested area of research includes the following:

- Development of high through-put assays to screen candidate drugs
- Identification of biomarkers for disease progression

- Development of better animal models of both Autosomal Dominant and Recessive PKD
- Pilot clinical trials to test promising drug therapies.

This grant mechanism IS NOT designed to support:

- Support for predoctoral students or post doctoral fellows

Amounts: Maximum annual budget of \$100,000 per year for two-years, with the possibility of a third year of funding, dependent upon study progress, as determined by the Translational Research Review Subcommittee, and the need for additional time to complete the project.

Indirect Costs: The total award amount is \$100,000 per year; indirect costs are limited to \$9,091 per year.

Requisites:

- Open to investigators with an M.D. or Ph.D. degree and that hold a faculty appointment at established academic and/or research institutions worldwide.
- The proposed project is focused on research relevant to PKD therapeutic development.

Grant Review: Scientific peer review is conducted by the PKD Foundation's Translational Research Review Subcommittee. All grants recommended for funding will receive final approval by the PKD Foundation Boards of Directors.

Deadlines:

Deadline for Receipt of Completed Application: January 15, 2008

Awards Announced: June 2008

Earliest Project Start Date: July 1, 2008

Additional information is available on the PKD Foundation website at: <http://www.pkdcure.org>
Please click on the '**Research/Medicine**' tab for application guideline information.

For any related inquiries, please contact:

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USA
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E-mail: amyf@pkdcure.org

NEW TSC PUBLICATIONS

Balaji R, Kesavadas C, Ramachandran K, Nayak SD, Priyakumari T (2007) Longitudinal CT and MR appearances of hemimegalencephaly in a patient with tuberous sclerosis. Childs Nerv Syst 2007 Sep 18 [Epub ahead of print]

Cao Q, Yu C, Xue R, Hsueh W, Pan P, Chen Z, Wang S, McNutt M, Gu J (2007) Autophagy induced by suberoylanilide hydroxamic acid in Hela S3 cells involves inhibition of protein kinase B and up-regulation of Beclin 1. Int J Biochem Cell Biol 2007 Aug 10 [Epub ahead of print]

Castagnetti M, Vezzu B, Laverda A, Zampieri S, Rigamonti W (2007) Urological Counseling and Followup in Pediatric Tuberous Sclerosis Complex. J Urol 2007 Sep 14 [Epub ahead of print]

- Chou IJ, Lin KL, Wong AM, Wang HS, Chou ML, Hung PC, Hsieh MY, Chang MY (2007) Neuroimaging correlation with neurological severity in tuberous sclerosis complex. *Eur J Paediatr Neurol* 2007 Sep 13 [Epub ahead of print]
- Cosgrove GP, Frankel SK, Brown KK (2007) Challenges in pulmonary fibrosis. 3: Cystic lung disease. *Thorax* 62(9):820-29
- Davis TA, Suryawan A, Orellana RA, Nguyen HV, Fiorotto ML (2007) Postnatal Ontogeny of Skeletal Muscle Protein Synthesis in Pigs. *J Anim Sci* 2007 Sep 4 [Epub ahead of print]
- De Padua M, Gupta N, Broor SL, Govil D (2007) Duodenal angiomyolipoma: a case report. *Indian J Pathol Microbiol* 50(3):568-9
- Fremont RD, Milstone AP, Light RW, Ninan M (2007) Chylothoraces after lung transplantation for lymphangioleiomyomatosis: review of the literature and utilization of a pleurovenous shunt. *J Heart Lung Transplant* 26(9):953-5
- Gazit AZ, Gandhi SK (2007) Pediatric Primary Cardiac Tumors: Diagnosis and Treatment. *Curr Treat Options Cardiovasc Med* 9(5):399-406
- Han EK, Levenson JD, McGonigal T, Shah OJ, Woods KW, Hunter T, Giranda VL, Luo Y (2007) Akt inhibitor A-443654 induces rapid Akt Ser-473 phosphorylation independent of mTORC1 inhibition. *Oncogene* 26(38):5655-61 [Epub 2007 Mar 5]
- Hirama M, Atsuta R, Mitani K, Kumasaka T, Gunji Y, Sasaki S, Iwase A, Takahashi K, Seyama K (2007) Lymphangioleiomyomatosis diagnosed by immunocytochemical and genetic analysis of lymphangioleiomyomatosis cell clusters found in chylous pleural effusion. *Intern Med* 46(18):1593-6 [Epub 2007 Sep 14]
- Jadhav MN, Yelikar BR, Patil SB (2007) Epithelioid angiomyolipoma of the kidney: a case report. *Indian J Pathol Microbiol* 50(2):338-40
- Kayampilly PP, Menon KM (2007) Follicle-stimulating hormone increases tuberin phosphorylation and mammalian target of rapamycin signaling through an extracellular signal-regulated kinase-dependent pathway in rat granulosa cells. *Endocrinology* 148(8):3950-7 [Epub 2007 May 17]
- Kenerson H, Folpe AL, Takayama TK, Yeung RS (2007) Activation of the mTOR pathway in sporadic angiomyolipomas and other perivascular epithelioid cell neoplasms. *Hum Pathol* 38(9):1361-71 [Epub 2007 May 22]
- Kinkor Z, Hes O (2007) [Pleomorphic epithelioid/clear cell malignant tumor of the uterus exhibiting both myoid and melanocytic differentiation--leiomyosarcoma or PEComa? A case report and a review of the literature.] *Cesk Patol* 43(3):103-8 [Article published in Czech]
- Land SC, Tee AR (2007) Hypoxia-inducible factor 1alpha is regulated by the mammalian target of rapamycin (mTOR) via an mTOR signaling motif. *J Biol Chem* 282(28):20534-43 [Epub 2007 May 14]
- Makki MI, Chugani DC, Janisse J, Chugani HT (2007) Characteristics of Abnormal Diffusivity in Normal-Appearing White Matter Investigated with Diffusion Tensor MR Imaging in Tuberous Sclerosis Complex. *AJNR Am J Neuroradiol* 2007 Sep 24 [Epub ahead of print]
- Malmer B, Adatto P, Armstrong G, Barnholtz-Sloan J, Bernstein JL, Claus E, Davis F, Houlston R, Il'yasova D, Jenkins R, Johansen C, Lai R, Lau C, McCarthy B, Nielsen H, Olson SH, Sadetzki S,

- Shete S, Wiklund F, Wrensch M, Yang P, Bondy M (2007) GLIOGENE an International Consortium to Understand Familial Glioma. *Cancer Epidemiol Biomarkers Prev* 16(9):1730-4
- Minami K, Tambe Y, Watanabe R, Isono T, Haneda M, Isobe K, Kobayashi T, Hino O, Okabe H, Chano T, Inoue H (2007) Suppression of Viral Replication by Stress-Inducible GADD34 Protein via the Mammalian Serine/Threonine Protein Kinase mTOR Pathway. *J Virol* 81(20):11106-15 [Epub 2007 Aug 1]
- Molinolo AA, Hewitt SM, Amornphimoltham P, Keelawat S, Rangdaeng S, Meneses Garcia A, Raimondi AR, Jufe R, Itoiz M, Gao Y, Saranath D, Kaleebi GS, Yoo GH, Leak L, Myers EM, Shintani S, Wong D, Massey HD, Yeudall WA, Lonardo F, Ensley J, Gutkind JS (2007) Dissecting the Akt/mammalian target of rapamycin signaling network: emerging results from the head and neck cancer tissue array initiative. *Clin Cancer Res* 13(17):4964-73
- Nakashima A, Yoshino K, Miyamoto T, Eguchi S, Oshiro N, Kikkawa U, Yonezawa K (2007) Identification of TBC7 having TBC domain as a novel binding protein to TSC1-TSC2 complex. *Biochem Biophys Res Commun* 361(1):218-23 [Epub 2007 Jul 16]
- Oh HS, Lee MC, Kim HS, Lee JS, Lee JH, Kim MK, Woo YJ, Kim JH, Kim HI, Kim SU (2007) Pathophysiologic characteristics of balloon cells in cortical dysplasia. *Childs Nerv Syst* 2007 Sep 26 [Epub ahead of print]
- Pan Z, Wang J, Yin X, Xie P, Yang J, Jiang J, Zhang L, He F (2007) The function study on the interaction between Grb2 and AMPK. *Mol Cell Biochem* 2007 Sep 12 [Epub ahead of print]
- Prasad SR, Sahani DV, Mino-Kenudson M, Narra VR, Humphrey PA, Menias CO, Chintapalli KN (2007) Neoplasms of the Perivascular Epithelioid Cell Involving the Abdomen and the Pelvis: Cross-sectional Imaging Findings. *J Comput Assist Tomogr* 31(5):688-696
- Rodriguez-Martin M, Saez-Rodriguez M, Garcia-Bustinduy M, Rodriguez-Garcia F, Martin-Herrera A, Noda-Cabrera A (2007) Simultaneous occurrence of neurofibromatosis type 5 and clustered incomplete tuberous sclerosis. *J Eur Acad Dermatol Venereol* 21(9):1278-80
- Saada J, Hadj-Rabia S, Fermont L, Lebidois J, Martinovic J, Sonigo P, Bonnet D, Dumez Y, Benachi A (2007) OC110: Prenatal diagnosis of cardiac rhabdomyomas: incidence of associated Tuberous Sclerosis Complex and cerebral lesions. *Ultrasound Obstet Gynecol* 30(4):401 [Epub ahead of print]
- Saemundsen E, Ludvigsson P, Rafnsson V (2007) Autism spectrum disorders in children with a history of infantile spasms: a population-based study. *J Child Neurol* 22(9):1102-7
- Segars JH (2007) Invited comment: "Identification of a sensitive period for developmental programming that increases risk for uterine leiomyoma in Eker rats". *Reprod Sci* 14(2):99-100
- Steagall WK, Glasgow CG, Hathaway OM, Avila NA, Taveira-Dasilva AM, Rabel A, Stylianou MP, Lin JP, Chen X, Moss J (2007) Genetic and morphologic determinants of pneumothorax in lymphangi leiomyomatosis. *Am J Physiol Lung Cell Mol Physiol* 293(3):L800-8 [Epub 2007 Jul 6]
- Suryawan A, Orellana RA, Nguyen HV, Jeyapalan AS, Fleming JR, Davis TA (2007) Activation by Insulin and Amino Acids of Signaling Components Leading to Translation Initiation in Skeletal Muscle of Neonatal Pigs Is Developmentally Regulated. *Am J Physiol Endocrinol Metab* 2007 Sep 18 [Epub ahead of print]
- Taveira-Dasilva AM, Hathaway OM, Sachdev V, Shizukuda Y, Birdsall CW, Moss J. (2007) Pulmonary Artery Pressure in Lymphangi leiomyomatosis. An Echocardiographic Study. *Chest* 2007 Sep 21 [Epub ahead of print]

Yuan CD, Chang XL, Gao M, Xiao FL, Wu YQ, Liu Q, Shen SK, Liu JL, Du WH, Liu JJ, Yang S, Zhang XJ, Zhou FS, Fang QY (2007) A novel mutation (insTCCG) in the TSC2 gene in a Chinese patient with Tuberous sclerosis complex. J Dermatol Sci 2007 Sep 19 [Epub ahead of print]

CONFERENCES AND SEMINARS

November 1, 2007

Neurons on the Map

San Diego, CA

<http://www.neuron-meeting.com>

November 3-4, 2007

Advances in Tuberous Sclerosis: From Pathway to Therapy

Sydney Children's Hospital, Randwick, NSW, Australia

For more information, contact Dr. David Mowat at d.mowat@unsw.edu.au or Dr John Lawson at

John.Lawson@unsw.edu.au

November 27–29, 2007

2007 National Prevention and Health Promotion Summit

Hyatt Regency Capitol Hill

Washington D.C.

Conference Contact Information: <http://www.cdc.gov/cochp/conference/index.htm>

November 29, 2007

The Carolyn Frye-Halloran Symposium on Neuro-Oncology

“Tumor Suppressor Syndromes – The Path to Clinical Trials”

Massachusetts General Hospital, Boston, MA

To register: <http://fh2007.neurosurg.info>

November 30 – December 4, 2007

American Epilepsy Society

Philadelphia Convention Center, Philadelphia, PA

For more information and to submit an abstract, go to: www.AESNET.org

TSC SIG will be held on Friday, November 30 at 1:00 pm, and stop by the TS Alliance exhibit in the Exhibit Hall!

April 4-6, 2008

LAM Foundation 2008 International Research Conference (LAMposium)

Westin Hotel, Cincinnati, OH

For more information: www.thelamfoundation.org

May 15-17, 2008

Conference on Diagnosis and Treatment in Pediatric Neurology

Warsaw, Poland

For more information: www.neuroped2008.pl

July 27-Aug 1, 2008

PKD Meeting Sponsored by FASEB

Snowmass, CO

More information coming soon!

September 11-13, 2008

TSC International Research Conference 2008

University of Sussex, Brighton, UK

Organized by the Tuberous Sclerosis Association, U.K.
For more information: www.tuberous-sclerosis.org

NEWS

Researchers Develop Mouse Model of Autism Spectrum Disorders

A genetic mutation found in some people with autism and Asperger syndrome causes social impairment and cognitive enhancement in mice. Mice with the mutation may represent an important advance in modeling autism spectrum disorders, offering researchers a new tool for understanding how specific defects in neural development lead to autism. This research was published in the September 06, 2007, issue of *Science Express* by Thomas C. Südhof, M.D., HHMI investigator, University of Texas Southwestern Medical Center at Dallas. For the full story, go to:

<http://www.hhmi.org//news/sudhof20070906.html>

Gene Assigns ID Tags to Help Organize the Developing Brain

A single gene capable of producing more than 38,000 cell surface proteins is an essential tool in assuring the assembly of precise neural circuits in the fruit fly, *Drosophila melanogaster*. Now, two teams of HHMI researchers have demonstrated how these closely related proteins establish the specificity that allows them to serve as identification tags for individual neurons. This research was published in the September 21, 2007, issue of *Cell* by HHMI investigators S. Lawrence Zipursky, Ph.D., at the University of California, Los Angeles and David Baker, Ph.D., at the University of Washington School of Medicine. For the full story, go to:

<http://www.hhmi.org//news/zipursky20070921.html>

Use of Family History Information in Pediatric Primary Care and Public Health

A supplement to the September issue of *Pediatrics* contains findings of a 2006 Workgroup Meeting on Use of Family History Information in Pediatric Primary Care and Public Health in Atlanta, Georgia. The meeting was sponsored by the National Center on Birth Defects and Developmental Disabilities, and the Centers for Disease Control and Prevention. The supplement includes information on such topics as:

- Linking family history in obstetric and pediatric care
- Assessing risk for genetic diseases and birth defects in pediatric primary care
- Utility of family history reports of major birth defects as a public health strategy
- Using family history to help detect children at risk for diabetes and cardiovascular disease.

For access to the *Pediatrics* supplement and more information about the workgroup meeting, including a meeting agenda, go to www.cdc.gov/ncbddd/bd/family_history.htm.

News from the National Institute of Mental Health, National Institutes of Health

The following information is available on the National Institutes of Mental Health, National Institutes of Health web site:

Global Survey Reveals Significant Gap in Meeting World's Mental Health Care Needs

http://www.nimh.nih.gov/press/wang_globalhealth.cfm

New Research to Help Youth with Mental Disorders Transition to Adulthood

http://www.nimh.nih.gov/press/transition_grants.cfm

Rates of Bipolar Diagnosis in Youth Rapidly Climbing, Treatment Patterns Similar to Adults

http://www.nimh.nih.gov/press/rates_bipolar_diagnosis.cfm

Studies Refine Understanding of Treatments for Bipolar Disorder

http://www.nimh.nih.gov/press/miklowitz_goldbergstep.cfm

Suspect Schizophrenia Genes Act Together to Thwart Working Memory

<http://www.nimh.nih.gov/press/gene-gene.cfm>

Bipolar Youth Show Distinct Pattern of Brain Development

<http://www.nimh.nih.gov/press/bipolartrajectory.cfm>

Unpleasant Words Trigger Strong Startle Response in People with Borderline Personality Disorder

http://www.nimh.nih.gov/press/hazlett-bpd_startle.cfm

Gene Triggers Obsessive Compulsive Disorder-Like Syndrome in Mice

http://www.nimh.nih.gov/press/feng OCD_mice.cfm

Behavioral Interventions Effective for Preschoolers with ADHD

http://www.nimh.nih.gov/press/dupaul_adhdintervention.cfm

Half of Children With Autism May be Diagnosable Soon After Their First Birthday

<http://www.nimh.nih.gov/press/autismdiagnosis.cfm>

New Studies Search for Clues to Mental Illness in Gatekeepers of Gene Expression

<http://www.nimh.nih.gov/press/micrnas.cfm>

TSC CLINICAL TRIALS AND STUDIES

A list of clinical trials that are currently enrolling study participants can be viewed on the TS Alliance web site at: <http://tsalliance.easycgi.com/pages.aspx?content=370>

TSC INFORMATION

For information about TSC and the Tuberous Sclerosis Alliance, 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.

This is the October 2007 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 November 2007 *TSC Alert* contact: vwhitemore@tsalliance.org

Archived issues of the TSC Alert can be found at: <http://www.tsalliance.org/pages.aspx?content=25>