

# TSC ALERT

## July 2008



## FUNDING OPPORTUNITIES

### FEDERAL FUNDING AGENCIES

#### National Institutes of Health

#### **Request for Information (RFI): Emerging Capabilities for Non-Invasive Imaging of Brain Structure and Function (Neuroscience Blueprint) (NOT-AG-08-005)**

National Institutes of Health

National Center for Complementary and Alternative Medicine

National Center for Research Resources

National Eye Institute

National Institute on Aging

National Institute on Alcohol Abuse and Alcoholism

National Institute of Biomedical Imaging and Engineering

*Eunice Kennedy Shriver* National Institute of Child Health and Human Development

National Institute on Drug Abuse

National Institute on Deafness and Other Communication Disorders

National Institute of Dental and Craniofacial Research

National Institute of Environmental Health Sciences

National Institute of General Medical Sciences

National Institute of Mental Health

National Institute of Neurological Disorders and Stroke

National Institute of Nursing Research

Office of Behavioral and Social Science Research

<http://grants.nih.gov/grants/guide/notice-files/NOT-AG-08-005.html>

#### **Rapid Access to Intervention Development (RAID) (NOT-CA-08-024)**

National Cancer Institute

<http://grants.nih.gov/grants/guide/notice-files/NOT-CA-08-024.html>

#### **Population Research Infrastructure Program FY09 (R24) (RFA-HD-08-007)**

*Eunice Kennedy Shriver* National Institute of Child Health and Human Development

Application Receipt Date(s): November 19, 2008

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HD-08-007.html>

#### **Outstanding New Environmental Scientist Award (ONES) (R01) (RFA-ES-08-003)**

National Institute of Environmental Health Sciences

Application Receipt Date(s): October 31, 2008

<http://grants.nih.gov/grants/guide/rfa-files/RFA-ES-08-003.html>

**NIGMS National Centers for Systems Biology (P50) (RFA-GM-09-009)**

National Institute of General Medical Sciences

Application Receipt Date(s): October 24, 2008

<http://grants.nih.gov/grants/guide/rfa-files/RFA-GM-09-009.html>

**Resource Program Grants in Bioinformatics (P41) (PA-08-180)**

*Eunice Kennedy Shriver* National Institute of Child Health and Human Development

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

<http://grants.nih.gov/grants/guide/pa-files/PA-08-180.html>

**Seeding Collaborative Interdisciplinary Team Science in Diabetes, Endocrinology and Metabolic Diseases (R24) (PAR-08-181)**

National Institute of Diabetes and Digestive and Kidney Diseases

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

<http://grants.nih.gov/grants/guide/pa-files/PAR-08-181.html>

**Collaborative Interdisciplinary Team Science in Diabetes, Endocrinology and Metabolic Diseases (R24) (PAR-08-182)**

National Institute of Diabetes and Digestive and Kidney Diseases

National Heart, Lung, and Blood Institute

Application Receipt/Submission Date(s): March 24, 2009, March 24, 2010, March 24, 2011

<http://grants.nih.gov/grants/guide/pa-files/PAR-08-182.html>

## **TSC PUBLICATIONS**

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## **CONFERENCES, WORKSHOPS, SEMINARS**

### **August 3-8, 2008**

#### **Gordon Conference: Mechanisms of Epilepsy and Neuronal Synchronization**

Colby College, Waterville, ME

Application Deadline: Applications for this meeting must be submitted by July 13, 2008

<http://www.grc.org/programs.aspx?year=2008&program=epilepsy>

### **September 11-13, 2008**

#### **Tuberous Sclerosis International Research Conference**

University of Sussex, Brighton, UK

We extend a warm invitation to all of our colleagues in the scientific community and beyond with an interest in tuberous sclerosis complex. The latest advances in the field will be presented for discussion on:

- TSC Molecular Biology and Genetics
- Neurobiology and Epilepsy

- Behaviour and Social Care
- Clinical trials
- Epidemiology and Natural History
- Clinical problems

Booking details and an outline conference programme will be posted on the website ([www.tuberous-sclerosis.org](http://www.tuberous-sclerosis.org)) shortly. Click here to download an [invitation flyer](#) or [email](#) Jane Cox, Deputy Head of Research for more information.

**September 21-25, 2008**

**8th European Congress on Epileptology**

Berlin, Germany

<http://www.epilepsyberlin2008.org>

**October 3, 2008**

**What A Difference an X Makes: The State of Women's Health Research**

Barbara Jordan Conference Center, Kaiser Family Foundation

Washington, DC

[Register for this free conference now.](#)

[View the agenda.](#)

**October 15-17, 2008**

**11th European Conference on Epilepsy & Society (IBE)**

Marseille, France

[http://www.epilepsyandsociety.org/conference\\_programme/conference\\_programme.html](http://www.epilepsyandsociety.org/conference_programme/conference_programme.html)

**November 5-8, 2008**

**5th Congreso Latinoamericano de Epilepsia (ILAE & IBE)**

Montevideo, Uruguay

<http://www.epilepsymontevideo2008.org>

**December 5-9, 2008**

**American Epilepsy Society and 2nd Biennial North American Regional Epilepsy Congress**

Seattle, Washington, USA

<http://www.aesnet.org/go/meetings-and-events/annual-meeting>

**\*\*Plan to attend the TSC Special Interest Group (SIG) on Tuesday, December 9th**

**June 28 – July 2, 2009**

**28th International Epilepsy Congress (ILAE & IBE)**

Budapest, Hungary

[www.epilepsybudapest2009.org](http://www.epilepsybudapest2009.org)

**September 12-16, 2009**

**International Tuberous Sclerosis Complex Conference**

Indian Lakes Hilton Resort

Bloomington, IL

More information coming soon at: [www.tsalliance.org](http://www.tsalliance.org)

## **NIH Peer Review**

On June 6, NIH Director Elias Zerhouni [announced](#) critical changes to enhance the [NIH peer review system](#). The changes reflect thousands of comments received from stakeholder communities throughout the year. To fulfill an important component of the new plan, the agency will commit \$1 billion over the next five years to “investigator-initiated high-risk, high-impact research to prevent a slowdown of transformative research, despite difficult budgetary times.” Other priorities include engaging the best reviewers, improving the quality and transparency of reviews, ensuring fair reviews across scientific fields and career stages, and developing a permanent process for continuous review of peer review.

## **Chemical Messenger Lets Synapses Communicate as Neurons Learn**

The brain's constant chatter demands coordination not only between neurons, but also between different sites on individual nerve cells. Researchers have now used sophisticated new imaging technology to identify a chemical messenger that helps neurons manage this task, enabling them to adjust their sensitivity to incoming signals to facilitate learning and memory. This research was published by Karel Svoboda, Ph.D., HHMI investigator, Janelia Farm Research Campus, in the June 13, 2008, issue of *Science Express*. For the full story, go to <http://www.hhmi.org/news/svoboda20080613.html>

## **Failure to Take Seizure Drugs Linked to Increased Risk of Death**

ST. PAUL, Minn. –People with epilepsy who fail to take their seizure medication regularly could be as much as three times more likely to die, according to a study published in the June 18, 2008, online issue of *Neurology*<sup>®</sup>, the medical journal of the American Academy of Neurology.

For the study, researchers looked at insurance records from three U.S. state Medicaid programs over eight and a half years. The study included 33,658 people with epilepsy who filled at least two epilepsy drug prescriptions.

The study found that people who took their epilepsy medication less than 80 percent of the time over the course of three months appeared to be three times more likely to die compared to people who took their medication regularly in a three-month period.

In addition, the study showed that hospital visits went up by 86 percent and emergency room visits increased by 50 percent during the time when people didn't take their medication regularly. There also appeared to be a significantly higher incidence of car accidents and bone breaks. Only head injuries were less common during periods of non-compliance with epilepsy drugs.

“These results are concerning since some studies show about 30 to 50 percent of people with epilepsy do not take their medication regularly,” said study author Edward Faught, MD, Director of the University of Alabama Epilepsy Center in Birmingham and Fellow of the American Academy of Neurology.

“There are many reasons epileptic patients fail to take their seizure medications, including cost, side effects and pregnancy. But this study suggests that none of those reasons overshadow the threat of death or other problems related to uncontrolled seizures. Patients need to stay on their medications and physicians need to recognize and treat issues related to people failing to take epilepsy drugs,” said Faught.

The study was supported by GlaxoSmithKline.

The American Academy of Neurology, an association of more than 21,000 neurologists and neuroscience professionals, is dedicated to improving patient care through education and research. A neurologist is a doctor with specialized training in diagnosing, treating and managing disorders of the brain and nervous system such as epilepsy, dystonia, migraine, Huntington's disease, and dementia. For more information about the American Academy of Neurology, visit [www.aan.com](http://www.aan.com).

## RESEARCH RESOURCES

### TSC1 and TSC2 Variation Databases

The TS Alliance funded the development and ongoing curation of the TSC1 and TSC2 Variation Database. These databases contain the reported variations (mutations and polymorphisms) in the TSC1 and TSC2 genes. The database is curated by Rosemary Ekong, PhD and Sue Povey, PhD at the University College London. To access the databases, go to:

TSC1 Database: [http://chromium.liacs.nl/LOVD2/TSC/home.php?select\\_db=TSC1](http://chromium.liacs.nl/LOVD2/TSC/home.php?select_db=TSC1)

TSC2 Database: [http://chromium.liacs.nl/LOVD2/TSC/home.php?select\\_db=TSC2](http://chromium.liacs.nl/LOVD2/TSC/home.php?select_db=TSC2)

### ADPKD Database

A revised version of the Autosomal Dominant Polycystic Kidney Disease (ADPKD) Database (PKDB) is now available for use. The PKDB has records on nearly 950 germ line variants and nearly 1000 of the somatic variants are included. There is also a link to all the publications that describe the variants. The curators feel that their revisions have made the database easier to use. We encourage you to view the expanded PKDB at <http://pkdb.mayo.edu> and provide any comments you may have to the Administrator.

## TSC CLINICAL TRIALS

**TSC Clinical Trials:** A complete 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>

## INFORMATION ABOUT TSC

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](mailto:info@tsalliance.org) or by telephone: 1-800-225-6872 or 301-562-9890.

This is the July 2008 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 August 2008 *TSC Alert* contact: [vwhitemore@tsalliance.org](mailto:vwhitemore@tsalliance.org)

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