

Epilepsy Foundation Research Program Overview Information for Talking Points (as of July 2008)

The key to a better life for millions of people with epilepsy is research. Only through research can we develop improved treatments, better understanding of causes and new ways to prevent seizures.

The Epilepsy Foundation research grants and fellowships program supports research on epilepsy-related issues in the basic, clinical and behavioral sciences. In 2007, 56 grants and fellowships were awarded. **More information on funded research projects can be found on the Foundation's website at: <http://www.epilepsyfoundation.org/research/awards.cfm>**

The Foundation invites investigators to apply for grants to test new ideas and follow new research leads. The applications, over 100 in an average year, are ranked on scientific merit by a blue ribbon panel of research scientists. The number of projects that are then funded is dependent on available resources. **Foundation fellowship and grant application instructions are available at <http://www.epilepsyfoundation.org/research/grants.cfm>**

This document outlines epilepsy research award programs offered in the following five categories.

- Research training fellowships
- Seed grants for young investigators
- Targeted research grants
- Translational research grants
- Research infrastructure grants

Research Fellowships

The future of epilepsy research depends on attracting the best scientific minds to the study of seizures and seizure disorders. The Epilepsy Foundation offers a series of one-year training fellowships in basic, clinical and behavioral science to scientists at the start of their careers. Awards are available for undergraduate, graduate, pre-doctoral and post-doctoral research in a wide range of relevant disciplines.

The following six fellowships are currently offered by the Foundation:

- The **Behavioral Sciences Post-Doctoral Fellowship** develops behavioral scientists to teach the appropriate psychosocial intervention techniques used in working with people with epilepsy, and contributes to the body of behavioral research in epilepsy. Individuals who will have received their doctoral degrees in a field of the social sciences by the time the Fellowship commences, and desire additional postdoctoral research experience, may apply.
- The **Behavioral Sciences Student Fellowship** encourages individuals to pursue careers in epilepsy in either research or practice settings. Appropriate fields include sociology, social work, psychology, anthropology, nursing, economics, vocational rehabilitation, counseling, political science, and others relevant to epilepsy research or practice. Both graduate and undergraduate students are eligible.
- The **Health Sciences Student Fellowship** encourages individuals to pursue careers in epilepsy in either research or practice settings. Eligible students are predoctoral training students in the Health Sciences enrolled, or accepted for enrollment, in medical school, a doctoral program, or other graduate program.
- The **Predoctoral Research Training Fellowship** supports pre-doctoral students with dissertation research related to epilepsy, thus strengthening their interest in establishing epilepsy research as a career direction. Graduate students pursuing a Ph.D. degree in neuroscience, physiology, pharmacology, psychology, biochemistry, genetics, nursing, or pharmacy may apply.
- The **Postdoctoral Research Fellowship** develops academic physicians and scientists committed to research related to epilepsy. Applications are considered equally from individuals interested in acquiring experience either in basic laboratory research or in the conduct of human clinical studies. Physicians or Ph.D. neuroscientists who desire postdoctoral research experience are eligible to apply.

- The **Research and Training Fellowships for Clinicians** is a postdoctoral fellowship program for clinically trained professionals. This fellowship is one-year of supervised study and research. Individuals with an MD or DO who will have completed residency training in neurology, neurosurgery, pediatrics, internal medicine, or psychiatry by the time the fellowship commences may apply. Other clinically trained professionals (i.e. PharmD, Doctor of Nursing) are also eligible to apply.

Research Grants

The following information applies to seed grants to young investigators that are offered in number dependent on the availability of funds.

- The **Research Grants Program** stimulates epilepsy research by providing funding for investigators in the early stages of their careers. One or two-year seed grants are awarded to clinical investigators or basic scientists for support of biological or behavioral research which will advance the understanding, treatment, and prevention of epilepsy. Applications from established investigators (Associate Professor level or above) are ineligible.

Targeted Research Initiatives

The Epilepsy Foundation offers funding opportunities for researchers to address epilepsy in targeted populations and issues. The current, active targeted research initiative programs are listed below.

- The Epilepsy Foundation's **Targeted Research Initiative for Mood Disorders** supports research leading to new insights into the diagnosis, etiology, complications and treatment of persons with epilepsy and mood disorders. Both clinical and basic projects are of interest, using a variety of disciplinary approaches. Investigators must hold a relevant advanced degree (M.D. and/or Ph.D.) and have completed all research training. Open to investigators based at corporations as well as academic/university settings.
- The **Targeted Research Initiative for Seniors** is looking for interested investigators to conduct pilot research in the fundamental knowledge of aging and epilepsy; diagnosis of partial seizures; and epilepsy therapeutics in the elderly. Investigators must hold a relevant advanced degree (M.D. and/or Ph.D.) and have completed all research training. Open to investigators based at corporations as well as academic/university settings.

- The **Targeted Research Initiative for Health Outcomes** addresses an important need for research to understand how different components of health care systems affect outcomes in people with epilepsy. The broad focus of the program includes methodological aspects of health and outcome measurement, health care needs assessment, nature and determinants of disparities in healthcare and methods of health care delivery. Investigators must hold a relevant advanced degree (M.D. and/or Ph.D.) and have completed all research training. Open to investigators based at corporations as well as academic/university settings.
- The **Partnership for Pediatric Epilepsy Research** is a program supported by a group of organizations interested in advancing research into pediatric epilepsy. The partnership supports novel, investigator-initiated studies which emphasize pediatric epilepsies, and specifically focus on increasing knowledge of causes and promoting innovative treatment approaches and a cure for epilepsies that begin in infancy and childhood. Fiscal year 2006 partners include *Epilepsy Foundation*, *American Epilepsy Society* and *Parents Against Childhood Epilepsy*. Both clinical and basic projects are of interest, using a variety of disciplinary approaches. Investigators must hold a relevant advanced degree (M.D. and/or Ph.D.) and have completed all research training. Open to investigators based at corporations as well as academic/university settings.

The Foundation anticipates expansion of the Targeted Research program to include new initiatives to focus on youth, women and reproductive issues, and catastrophic epilepsies. Increased funding commitments will leverage opportunities to secure additional, necessary funding to sustain these initiatives and the overall research program as we work toward new and enhanced treatment options for people with epilepsy.

Epilepsy Research Foundation

The **Epilepsy Research Foundation** is a unique partnership corporation that supports the Epilepsy Foundation's commitment to seeking out new therapies and ultimately a cure for epilepsy. It was created through a partnership between the Epilepsy Foundation and The Epilepsy Therapy Development Project.

The Epilepsy Research Foundation's **New Therapy Grants Program** supports the development of more effective therapies by serving as a catalyst for moving innovative therapies from the laboratory to the patient. The program seeks to bring new therapies to patients by supporting translational research and early stage commercialization. Investigators

must hold a relevant advanced degree (M.D., and/or Ph.D.), and have completed all research training. This call for proposals is open to investigators at corporations as well as the academic/university arena.

Research Infrastructure Awards

The American Epilepsy Society and the Epilepsy Foundation are partnering to provide an opportunity for scientists to obtain support for nationwide or international networks of clinical or basic science researchers focused on understanding the causes, consequences and treatment of epilepsy. Multicenter research programs are viewed as an important venue through which investigators from around the world can establish centralized databases, common protocols, shared resources, core laboratories and exchange rapidly developing techniques and technologies. Such cooperative efforts are anticipated to hasten the speed of discovery. These funds are meant to be used to support pilot projects and hold organizational and planning sessions with representatives from each center in the planned network. These planning sessions should also be used to develop the research effort and collect results that would be used to prepare and submit a larger application for support from the federal government and establish the multicenter research program over the long term.