

*NINDS Notes* is published 3 times a year and consists of summaries of NINDS's current funding announcements and requests for volunteers for clinical trials. *Notes* is of primary importance to scientists, physicians, and research directors with an interest in neuroscience.

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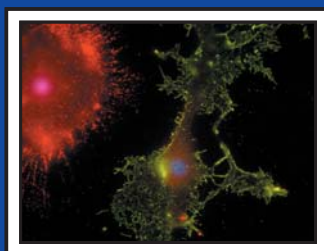
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*Microglial Cells and Oligodendrocyte by  
Dr. Riccardo Cassiani-Ingoni, NINDS*

# News & Notes

# Funding Opportunities

## **NINDS Announces a New Research Education Program**

NINDS recently announced a new research education program for residents. The research education grant is a flexible and specialized mechanism designed to encourage the development of neuroscience researchers through both research training and educational experiences. It will prepare clinicians to successfully compete for individual fellowships or mentored career development awards.

There is critical need for additional clinician-scientists with the medical training and research experience to conduct basic, clinical, and translational research on neurological disorders. NINDS provides mentored career development awards (K08 and K23 grant mechanisms) to highly qualified clinician-scientists who have early training and experience in research, and who generally have one or more significant, original research publications. However, there is need for a mechanism to support the early training of clinicians during the residency/fellowship period in research and related skills, which would enable them to compete successfully for the mentored career development awards.

The research education grant to neurology and/or neurosurgery programs will create an opportunity for residents in neuro-related training programs (e.g., neurology, neurosurgery, neuropathology, and neuroradiology) to participate in a 6- to 12-month mentored research education experience during their residency. Funding may be continued for up to 12 months in their fellowship years. It will include the necessary training for successful competition for independent mentored research awards and will facilitate the transition from resident to research fellow to clinician-scientist. In addition to laboratory research skills, participants will develop the critical skills necessary to design and conduct research experiments and write competitive grant applications.

The overall goal of the program is to ensure that highly trained neuroscientists will be available to make future advances that will lead to a reduction in the burden of neurological disease.

The deadline for receiving applications is September 10, 2008. Potential applicants should contact Dr. Stephen Korn, Director of Training and Career Development, NINDS; telephone: 301-496-4188; email: [korns@ninds.nih.gov](mailto:korns@ninds.nih.gov). For more information, visit <http://grants2.nih.gov/grants/guide/rfa-files/RFA-NS-09-001.html>.

## **Brain Disorders in the Developing World**

NINDS invites applications for research on brain disorders in the developing world, across the lifespan. This announcement is made together with 8 other NIH components and is supported by 2 funding mechanisms: R01 and R21.

During the past several decades, improvements in healthcare have led to a decrease in child mortality and an increase in life expectancy in low- and middle-income countries (LMIC). The purpose of this announcement is to encourage innovative, collaborative research and research training projects, between high income country and LMIC scientists, on nervous system function and disorders throughout life.

Potential applicants should contact Dr. Yuan Liu, Chief, Office of International Activities, NINDS; telephone: 301-496-0012; email: [yl5o@nih.gov](mailto:yl5o@nih.gov). For a more detailed description of this program announcement, visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-112.html> or <http://grants.nih.gov/grants/guide/pa-files/PAR-08-113.html>.

## **Center Core Grants**

NINDS encourages applications for center core grants to support neuroscience research.

The purpose of these grants is to advance the NINDS mission to promote understanding and treatment of neurological disorders by providing core research facilities that are not otherwise available. This support, by providing more accessible resources, is expected to assure a greater productivity than would be possible from separate projects. An applicant organization is eligible for only one NINDS center core grant.

Potential applicants should contact Dr. Thomas Miller, Program Director, Technology Development Group, NINDS; telephone: 301-496-1779; email: [tm208y@nih.gov](mailto:tm208y@nih.gov). For a more detailed description of this program announcement, visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-116.html>.

### **Enhancing Zebrafish Research (Genetic Screens)**

NINDS invites applications to develop genetic screens to enhance zebrafish research. This announcement is made together with 12 other NIH components.

Encouraged are applications designed to exploit the power of the zebrafish as a vertebrate model for biomedical and behavioral research. This announcement welcomes applications to develop new genetic screens that will advance the detection and characterization of genes, pathways, and phenotypes of interest in development and aging, organ formation, neural processes, behavior, sensory processes, physiological processes, and disease processes.

Potential applicants should contact Dr. Lorette Javois, Center for Developmental Biology and Perinatal Medicine, Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD); telephone: 301-496-5541; email: [lj89j@nih.gov](mailto:lj89j@nih.gov). For a more detailed description of this program announcement, visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-138.html>.<sup>..v</sup>

### **Enhancing Zebrafish Research (Tools and Techniques)**

NINDS invites applications to develop tools and techniques to enhance zebrafish research. This announcement is made together with 13 other NIH components.

Encouraged are applications designed to exploit the power of the zebrafish as a vertebrate model for biomedical and behavioral research. This announcement welcomes applications to develop new research tools or techniques that will advance the detection and characterization of genes, pathways, and phenotypes of interest in development and aging, organ formation, neural processes, behavior, sensory processes, physiological processes, and disease processes.

Potential applicants should contact Dr. Rebekah S. Rasooly, Division of Kidney, Urologic, and Hematologic Diseases, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); telephone: 301-594-6007; email: [rr185i@nih.gov](mailto:rr185i@nih.gov). For a more detailed description of this program announcement, visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-139.html>.<sup>..v</sup>

### **Links Between the Immune System, Brain Function, and Behavior**

NINDS encourages applications for research on functional links between the immune system, brain function, and behavior. This announcement is made together with 7 other NIH components and is supported by 2 funding mechanisms: R01 and R21.

Despite the brain's status as an immune-privileged site, an extensive bi-directional communication takes place between the nervous and immune systems in both health and disease. Immune cells and neuroimmune molecules such as cytokines, chemokines, and growth factors modulate brain function through multiple signaling pathways throughout the lifespan. The purpose of this announcement is to help bridge the gap in understanding how immune cells and their mediators affect brain development, function, and behavior related to cognition and mood.

Potential applicants should contact Dr. Ursula Utz, Program Director, Neural Environment Cluster, NINDS; telephone: 301-496-1431; email: [uu1p@nih.gov](mailto:uu1p@nih.gov). For a more detailed description of this program announcement, visit <http://grants.nih.gov/grants/guide/PA-files/PA-08-097.html> or <http://grants.nih.gov/grants/guide/PA-files/PA-08-098.html>.<sup>..v</sup>

### **Mechanisms of Functional Recovery After Stroke**

NINDS invites applications for research on mechanisms of functional recovery after stroke. This announcement is made together with 3 other NIH components and is supported by 2 funding mechanisms: R01 and R21.

While stroke is the third leading cause of death in the United States, it is the leading cause of long-term disability in the American population. This announcement seeks to expand studies on basic brain mechanisms of repair and plasticity after stroke, and on factors that influence these mechanisms. In addition, methods and approaches to improve and enhance reparative processes may be investigated, toward the goal of optimizing and developing promising new approaches to rehabilitation and functional recovery after stroke.

Potential applicants should contact Dr. Eugene Golanov, Program Director, Neural Environment Cluster, NINDS; telephone: 301-496-1431; email: [golanove@ninds.nih.gov](mailto:golanove@ninds.nih.gov). For a more detailed description of this announcement, visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-099.html> or <http://grants.nih.gov/grants/guide/pa-files/PA-08-100.html>.<sup>..v</sup>

### **Midcareer Investigator Awards**

NINDS invites applications for midcareer investigator awards in patient-oriented research. This announcement is made together with 18 other NIH components.

The objectives of these awards are to enable mid-career clinician scientists to devote more time to patient-oriented research, augment their capabilities in patient-oriented research, and mentor new clinical investigators in conducting patient-oriented research.

Potential applicants should contact Dr. Stephen Korn, Director of Training and Career Development, NINDS; telephone: 301-496-4188; email: [korns@ninds.nih.gov](mailto:korns@ninds.nih.gov). For a more detailed description of this announcement, visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-151.html>.<sup>NN</sup>

### **National Research Service Awards**

NINDS encourages applications for the jointly-sponsored Ruth L. Kirschstein National Research Service Award Predoctoral Training Program in the Neurosciences. This announcement is made together with 9 other NIH components.

The aim of this program is to encourage and support broad, early-stage training in the neurosciences by offering institutions a single, comprehensive training grant. The program supports the early years of graduate training, i.e., the first and second years, typically before full-time thesis research begins. Trainees are expected to be participants in a formal predoctoral curriculum offering broad and fundamental training in the neurosciences.

Potential applicants should contact Dr. Stephen Korn, Director of Training and Career Development, NINDS; telephone: 301-496-4188; email: [korns@ninds.nih.gov](mailto:korns@ninds.nih.gov). For a more detailed description of this announcement, visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-101.html>.<sup>NN</sup>

### **Neurological Recovery in Traumatic Brain Injury**

NINDS and the Eunice Kennedy Shriver National Institute of Child Health and Human Development request grant applications for research using multi-drug combinations to promote neurological recovery in traumatic brain injury.

Severe head injury is a massive, crude insult across the nervous system. Identification of the earliest recovery window and application of neuroprotective treatment is of the highest research priority. The development of novel therapeutic approaches to improve functional recovery is essential, with specific attention to research that will evaluate new pharmacological compounds, including a combination of agents.

Letters of Intent Receipt Date: October 28, 2008

Application Receipt Date: November 28, 2008

Potential applicants should contact Dr. Ramona Hicks, Program Director, Repair and Plasticity Cluster, NINDS; telephone: 301-496-1447; email: [hicksra@mail.nih.gov](mailto:hicksra@mail.nih.gov). For a more detailed description of this announcement, visit <http://grants.nih.gov/grants/guide/rfa-files/RFA-HD-08-003.html>.<sup>NN</sup>

### **Support for Conferences and Scientific Meetings**

NINDS invites applications for support for conferences and scientific meetings. This announcement is made together with 24 other NIH components.

The purpose of the announcement is to support high quality conferences and scientific meetings that are relevant to the scientific mission of NIH and to public health. A conference/scientific meeting is defined as a gathering, symposium, seminar, scientific meeting, workshop or any other organized, formal meeting where people coordinate, exchange, and disseminate information, or to explore or clarify a defined subject, problem, or area of knowledge.

Potential applicants should contact Dr. Alan Willard, Chief, Scientific Review Branch, NINDS; telephone: 301-496-9223; email: [aw135y@nih.gov](mailto:aw135y@nih.gov). For a more detailed description of this announcement, visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-149.html>.<sup>NN</sup>

### **Tools for Monitoring and Manipulating Nervous System Plasticity**

NINDS requests applications to develop probes and instruments for monitoring and manipulating nervous system plasticity. This announcement is made together with 15 other NIH components and is supported by 2 funding mechanisms: R01 and R43/R44. It also is affiliated with the NIH Blueprint for Neuroscience Research.

The Blueprint is a framework to enhance cooperative activities among the 16 NIH Institutes, Centers, and Offices that support research on the nervous system.

Neuroplasticity, the ability to change signaling connections and function in response to endogenous or environmental events, is a key feature of the nervous system. It is a foundation for myriad neural processes that occur during development, adulthood, and aging—including events as diverse as memory, sensory perception, reward and motivation, and autonomic homeostasis. This announcement calls for projects to develop probes, instruments, and other tools for understanding, monitoring, and manipulating nervous system plasticity.

Letters of Intent Receipt Date: August 16, 2008

Application Receipt Date: September 16, 2008

Potential applicants should contact Dr. Randall Stewart, Program Director, Channels, Synapses, and Circuits Cluster, NINDS; telephone: 301-496-1917; email: [stewarr@ninds.nih.gov](mailto:stewarr@ninds.nih.gov). For a more detailed description of this announcement, visit <http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-09-030.html> or <http://grants.nih.gov/grants/guide/pa-files/PA-08-146.html>.<sup>NN</sup>

# Volunteers Needed

## Individuals with Frontotemporal Dementias Sought for Study

Scientists at NINDS seek persons with frontotemporal dementia, Pick's disease, progressive aphasia, or corticobasal degeneration, ages 21-80, for an evaluation study involving neuropsychological and genetic testing, a neurological examination, magnetic resonance imaging (MRI), and positron emission tomography (PET).

Eligible persons should be able to travel to NIH in Bethesda, MD, for the study, and have a diagnosis of one of the following: frontotemporal dementia, Pick's disease, progressive aphasia, or corticobasal degeneration. Persons who are unable to cooperate with neuropsychological testing or unable to travel back and forth to the NIH or who have other serious medical illnesses may not be eligible.

The study requires a 1- to 2-week inpatient or outpatient stay at NIH at no cost to the participants. Travel to and from NIH is provided for participants and caregivers.

For more information, contact Dr. Jordan Grafman, Chief, Cognitive Neuroscience Section, NINDS, Building 10, Room 7D43, 10 Center Drive MSC 1440, Bethesda, MD 20892-1440; telephone: 301-496-0220; fax: 301-480-2909; email: [jg40b@nih.gov](mailto:jg40b@nih.gov). Please refer to study number 81-N-0010. ..VV

## Persons with Parkinson's Disease Sought for Study

Scientists at NINDS are seeking persons with Parkinson's disease (PD) for a research study to learn how the brains of people with the disease behave during rewards and how commonly used medications affect this process. As part of the study, participants will be playing a slot machine simulation, winning real money. Two commonly used medications for PD will be given during parts of the study. Transcranial magnetic stimulation and psychological tests will be used to look at the brain's response to rewarding situations.

Eligible persons must have mild to moderate PD, as determined by the investigators, and be 50 to 80 years old (for women) or 45 to 80 years old (for men). Persons who have taken dopamine agonists or other medications that affect the dopamine system within the past month, gamble frequently, have more than two alcoholic drinks a day or use illicit drugs, or have metal in the head or eye, a pacemaker or another implanted metal medical device are ineligible. Pre-menopausal women also are ineligible.

The study will be conducted at the NIH Clinical Center in Bethesda, MD. Transportation to and from NIH will be provided. The study involves two outpatient visits approximately 3 to 4 hours each. Participants will be paid for their time and inconvenience, and also will keep the earnings of the slot machine simulation. ..VV

For more information, contact Dimitrios Kapogiannis at 301-451-9286. Please refer to study number 08-N-0023. ..VV

## Persons with Swallowing Disorders Sought for Study

Many people with a brain injury, stroke, or other neurological disorder experience difficulty in swallowing, a condition known as "dysphagia." Researchers at NINDS are conducting two different experimental studies for qualified participants that may improve swallowing.

In the first study (06-N-0212 - [http://clinicalstudies.info.nih.gov/detail/A\\_2006-N-0212.html](http://clinicalstudies.info.nih.gov/detail/A_2006-N-0212.html)) the experimental methods include an implanted electrical stimulation device and a handheld vibration device. Individuals will have 10 training sessions with their devices at the NIH Clinical Center in Bethesda, MD, plus approximately 4 follow-up visits.

In the second study (06-N-0120 - [http://clinicalstudies.info.nih.gov/cgi/wais/bold032001.pl?A\\_06-N-0120.html@06-N-0120](http://clinicalstudies.info.nih.gov/cgi/wais/bold032001.pl?A_06-N-0120.html@06-N-0120)) different combinations of vibratory stimulation to the neck and low-level electrical stimulation to the scalp will be used during swallowing training. Individuals will receive 12 training sessions at the NIH Clinical Center, plus approximately 5 pre- and post-testing visits.

For both studies, transportation is available and all study-related procedures are provided at no cost.

For more information about study # 06-N-0212, contact Katie Dietrich-Burns, Laryngeal and Speech Section, Medical Neurology Branch, NINDS; telephone: 301-594-5193. For information about study # 06-N-0120, contact Dr. Soren Lowell, Laryngeal and Speech Section, Medical Neurology Branch, NINDS; telephone: 301-401-5891. ..VV