

RELEASE DATE: August 20, 2008

APPLICATION RECEIPT DATE: October 13, 2008; 5:00 P.M.

NIH/NIAID Region V Great Lakes

Regional Center of Excellence for Biodefense and Emerging Infectious Diseases Research

Request for Applications: Individual Career Development Support Program for Post-Doctoral Fellows Awards (ICDSP-PA, formerly known as the Postdoctoral Research Awards - PRA)

PURPOSE OF THE RFA

The Great Lakes Regional Center of Excellence (GLRCE) for Biodefense and Emerging Infectious Diseases invites investigators from within Region V to submit proposals to be considered as potential Post-Doctoral Fellows Awards starting in March of 2009, pending GLRCE renewal.

The mission of the GLRCE is to develop novel vaccines, therapeutics and diagnostics to combat microbiological agents identified as having the potential to pose a severe threat to public health and safety. Proposals must focus on Category A, B or C agents and Emerging Infectious Diseases (EID) pathogens. Listings of Categories A, B and C pathogens can be found at <http://www.rcebiodfense.org/glrc/docs/Cat.pdf> and the EID pathogens are listed at <http://www3.niaid.nih.gov/research/topics/emerging/list.htm>. The 2007 NIAID Strategic Plan for Biodefense Research describes interest in fundamental research and the development of broadly applicable drugs and diagnostics for select agents. Please consult the listed NIAID document for details <http://www.rcebiodfense.org/glrc/docs/biosp2007.pdf> or visit the GLRCE website (www.glrc.org) for updated information. Where appropriate, submission of multidisciplinary proposals is strongly encouraged; the beneficiary relationship of participating technologies as well as the interactions of scientists in different fields and institutions must be made transparent.

The GLRCE ICDSP-PA aims to train the next generation of investigators in biodefense and emerging infectious diseases through its support of newly graduated scientists in the development of innovative research programs. This program is intended to support researchers who have 0-2 years postdoctoral training, though awards may also be granted to more senior fellows who are recently changing fields into biodefense research. Furthermore, the ICDSP-PA provides rigorous training and professional development to enable a successful career in infectious disease research. To achieve these goals, the GLRCE ICDSP-PA is committed to providing its trainees with education and experience in BSL3 research. Fellowship awardees are required to pursue their research training on a full-time basis, devoting at least 40 hours per week to the training program.

Topics of interest to the GLRCE include, but are not limited to:

- Pathogen biology, including the identification and characterization of new virulence factors
- Biology of microbial toxins
- Host Immune responses and defense mechanism
- Microbial immune evasion strategies and resistance mechanisms to therapeutics
- Animal models of infection and immunity
- Target identification for vaccines and therapeutics
- Novel adjuvants and medical diagnostics
- Vaccine development
- Discovery of therapeutics for infectious diseases

Special consideration will be given to those proposals which emphasize the discovery and early development of medical products.

PARTICIPATION IN THE GREAT LAKES REGIONAL CENTER OF EXCELLENCE

The GLRCE is a consortium based in the federally-designated “Region V” of the United States. (In all, ten Regions exist, each consisting of a group of contiguous states.) Region V includes six states in the upper Midwest: Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin. Presently, twenty institutions in Region V are formally associated with the GLRCE, including the University of Chicago, Northwestern University, Argonne National Laboratory, Battelle Memorial Institute, Illinois State University, Indiana University, Loyola University of Chicago, Mayo Clinic, Medical College of Wisconsin, Michigan State University, the Ohio State University, Purdue University, University of Cincinnati, University of Illinois at Chicago, University of Illinois at Urbana-Champaign, University of Indiana, University of Michigan, University of Minnesota at Minneapolis, University of Notre Dame, University of Wisconsin at Madison, and Wright State University. For an investigator to be funded by the GLRCE, his/her institution must be a formal member of the consortium.

The Great Lakes Regional Center of Excellence for Biodefense and Emerging Infectious Disease Research endeavors to expand the roster of institutions formally within the consortium, as well as the roster of member institutions funded. The GLRCE encourages institutions within the federally-designated Region V to join the consortium. To become a member of the consortium, an institution must send a formal letter of support to the Principal Investigator of the GLRCE, Olaf Schneewind, MD, PhD. For further information on joining the GLRCE, including a template letter, please contact Catherine Will, GLRCE Grants and Contracts Specialist at cwill@bsd.uchicago.edu or 773-834-9174. Institutions new to the consortium are required to subscribe to the GLRCE Intellectual Property Plan. For a copy of the GLRCE Intellectual Property Plan, please contact Navneet Bhasin, GLRCE Associate Director, at nbhasin@bsd.uchicago.edu.

RESEARCH CURRENTLY SUPPORTED BY THE GLRCE

The Great Lakes Regional Center of Excellence for Biodefense and Emerging Infectious Disease Research currently supports over twenty research projects focused on the molecular analysis and intervention of the following pathogens and toxins:

- *Bacillus anthracis*
- Botulinum neurotoxin
- *Yersinia pestis*
- *Francisella tularensis*
- *Brucella melitensis*
- *Rickettsia rickettsii*
- Ebola virus
- Flaviviruses
- Alphaviruses
- Rift Valley fever virus
- Pox viruses
- *Toxoplasma gondii*

RESOURCES OF THE GLRCE

To facilitate the research and training objectives of GLRCE investigators, the consortium also supports four research resources, including:

- Animal Research and Immunology Core
- *Clostridium botulinum* and Neurotoxin Core
- BSL3 laboratory space – Howard Taylor Ricketts Laboratory
- Emergency Response Plan

These resources are available for use by GLRCE researchers to enable access to specialized facilities or services that can accelerate research and development progress. For more information on core services or using the cores, please visit http://www.glrce.org/cores_facilities.php or contact Navneet Bhasin at nbhasin@bsd.uchicago.edu.

In addition to these GLRCE research resources, the NIAID National RCE Biodefense Network supports additional research resources that may be used by any RCE member. These resources include:

- National Screening Laboratory for the Regional Centers of Excellence for Biodefense and Emerging Infectious Disease (NSRB) <http://nsrb.med.harvard.edu>

THE GLRCE ICDSP-PA PROGRAM

The GLRCE Career Development Program is for new faculty and post-doctoral research associates and is specifically designed to recruit investigators without substantive experience in biodefense research in the field. The GLRCE ICDSP-PA encourages collaborations between established investigators in biodefense/emerging infectious diseases and post-docs without substantive experience in these fields. Each applicant should identify a GLRCE mentor in biodefense or emerging infectious diseases. This individual may be the laboratory head under which the applicant currently trains. Please contact the GLRCE Associate Director for assistance in identifying an appropriate mentor if needed. If the applicant's mentor is not his/her laboratory head, a Curriculum vitae and letter of support from the mentor (in addition to the applicant's laboratory head) should be included in the application. A GLRCE mentor may be particularly valuable for applicants who wish to work on a high-containment project related to work in a lab that does not currently have those capabilities. Postdoctoral applicants in Region V are encouraged to employ the resources of the GLRCE and NIAID Biodefense Network in developing their applications, including use of the GLRCE Cores and Components.

By the date of the award, all GLRCE Postdoctoral Trainees and mentors must reside in institutions that formally belong to the GLRCE.

TRAINING IN RESEARCH AND BIOSAFETY

The GLRCE Postdoctoral Training Program is committed to educating its trainees in areas essential to their careers studying NIAID Category A, B & C Priority Pathogens and Emerging Diseases. Each budget should therefore include:

- Expenses to attend one national scientific meeting where the investigator will present his or her original work, to be completed in each year of support ;

- One time expenses for training in high containment research (biosafety level 3 or 4), to be completed during the first year of support. Please contact GLRCE Associate Director, Navneet Bhasin for information on acceptable training venues.

Successful completion of these educational objectives is a requirement of the GLRCE ICDSP-PA

SUBMITTING AN APPLICATION

The application (due October 13, 2008 at 5:00p.m.) should utilize the latest PHS 398 **non-modular** application forms. Your proposal must be institutionally endorsed.

- Up to 5 pages of text including specific aims, background and significance, preliminary data, and research plan (sections a-d of PHS 398 forms). Copies of manuscripts in press may be included as appendices and will not count against the page limit.
- Human Subjects, Vertebrate Animals, Literature Cited and Consultants must be included but do not count against the page total. Projects that include research involving human subjects must also include a NIAID Human Subject Research Concept Sheet. To obtain a copy of the Concept Sheet, please contact Navneet Bhasin at nbhasin@bsd.uchicago.edu;
- Statement of career objectives (one to two pages)
- Biosketch and letters of support from the proposed mentor and the laboratory head as well as any key participants in the project (collaborators, GLRCE cores or components, members of other Centers or members of industry, as applicable).

PHS 398 forms may be found at: <http://grants.nih.gov/grants/funding/phs398/phs398.html>

RECEIPT AND REVIEW SCHEDULE

Mailed applications must be received by 5:00 p.m. on October 13, 2008 (sent to Catherine Will, please see address below). For administrative purposes, please upload the application as a Word file to the GLRCE Drop Box. Instructions and explanations are available at <http://www.glrce.org/upload>. The GLRCE Executive Board will conduct a review session of the applications in the first week of November, 2008 to determine which applications will be recommended to the NIAID for funding through the consortium.

ELIGIBILITY REQUIREMENTS

Citizenship. By the time of award candidates for the GLRCE Postdoctoral Training Program must be citizens or non-citizen nationals of the United States, or must have been lawfully admitted to the United States for Permanent Residence (i.e., possess a currently valid Alien Registration Receipt Card I-551, or other legal verification of such status). Individuals on temporary or student visas are not eligible.

Degree Requirements. Before a GLRCE ICDSP-PA award can be activated, the individual must have received a Ph.D., M.D., or equivalent doctoral degree from an accredited domestic or foreign institution.

Duration of Support. Individuals may receive only one year of GLRCE Postdoctoral Training Program support at the postdoctoral level. An additional year of funding may be requested, contingent upon the continued funding of GLRCE.

Mentor(s). Within a GLRCE ICDSP-PA proposal, the applicant must identify an individual (or individuals) who will serve in a mentor capacity and will supervise the research and training experience.

The mentor(s) must belong to a GLRCE institution by the date of the award. The applicant's mentor(s) should be an active investigator in the area of the proposed research who will supervise the candidate's research. The mentor must be able to document the availability of research support and facilities for high-quality research training.

Other Support. Postdoctoral Fellowship support from the GLRCE represents a unique funding opportunity and is designed to enable young scientists, who recently completed their graduate studies, launch research projects in biodefense and emerging infectious diseases topics. GLRCE fellowship support is not appropriate for the continued funding of fellows that have previously received NIH, NSF or Foundation support.

REVIEW CRITERIA

Applications will be reviewed for technical and programmatic merit by the GLRCE Executive Board (EB). The EB is comprised of established infectious disease researchers from the GLRCE member institutions, and has the primary responsibility for the review of all science in the consortium. Applications selected by the EB for funding must also be approved by the NIAID RCE Program Officers prior to an award. The entire review and decision process is expected to take 4-8 weeks.

The criteria for selection used by the EB will comprise four main components.

- Candidate. An assessment of the candidate's previous academic and research performance and the potential to become an important contributor to biodefense or emerging infectious disease research.
- Mentor(s) and Training Environment(s). An assessment of the quality of the training environment(s) and the qualifications of the mentor(s) for the proposed research training experience.
- Research Proposal. The merit of the scientific proposal and its complementarity to existing GLRCE programs.
- Training Potential. An assessment of the value of the proposed training experience as it relates to the candidate's needs in preparation for a career as an independent researcher.

FUNDING

Up to four, GLRCE ICDSPPA applications will be recommended to the NIAID for funding. Awards are granted for a maximum of \$56,500 in direct costs. Awards are granted for one year and may be renewed for an additional year, contingent upon the competitive annual review and continued funding of the GLRCE and the ICDSPPA by the NIAID. GLRCE ICDSPPA Projects are evaluated on a routine basis (see below), and their continued funding is dependent on satisfactory progress as judged by the GLRCE Executive Board. The Executive Board then makes official GLRCE recommendations to the NIAID, whose RCE program officers ultimately approve continued funding.

GLRCE ICDSPPA PROGRESS REPORTS

The progress of all ICDSPPA will be closely monitored by the GLRCE Executive Board and the NIAID. Quarterly scientific progress and spending reports must be submitted to the Executive Board via Navneet Bhasin, Associate Director of the GLRCE, on March 1, June 1 and September 1. Postdoctoral Training Projects are also expected to submit on December 1 progress reports for inclusion in the GLRCE's consolidated progress report to the NIAID, due January 1. In addition, all GLRCE funded research must present progress at the annual GLRCE meeting, held each year in late fall.

WHERE TO SEND INQUIRIES

Direct questions about review, scientific or research issues to:

Navneet Bhasin, Ph.D.
Associate Director
NIH/NIAID Region V Great Lakes Regional Center of Excellence
for Biodefense and Emerging Infectious Diseases
University of Chicago
920 E. 58th St., Suite 1117
Chicago, IL 60637
773.834.9706
nbhasin@bsd.uchicago.edu

Direct questions about financial or grants management matters, and application submission to:

Catherine Will
Grants and Contracts Specialist
NIH/NIAID Region V Great Lakes Regional Center of Excellence
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