

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 Disease Research

Request for Applications: Individual Career Development Support Program for Faculty awards (ICDSP-FA, formerly known as the Career Developmental Projects - CDPs)

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 Career Development Faculty 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.rcebiodefense.org/glrcce/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.rcebiodefense.org/glrcce/docs/biosp2007.pdf> or visit the GLRCE website (www.glrcce.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-FA will support innovative research that has a high likelihood of yielding information leading to the development of new vaccines, therapeutics and/or diagnostics against these agents. Furthermore, the ICDSP-FA aims to support the advancement of junior faculty in biodefense research. Therefore, the ICDSP-FA is limited to newly appointed faculty (fewer than 5 years experience at an academic institution) and incorporates a mentorship program designed to enhance access to valuable expertise and reagents. Results gained from the ICDSP-FA are intended to support the acquisition of funding from traditional federal mechanisms (NIH R01, etc). 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 projects which emphasize 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, 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 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>

GLRCE ICDSF-FA PROGRAM

The overall goal of this program is to develop a cadre of highly trained individuals that strengthen the research and development portfolio for biodefense in Region V. To achieve this goal, the GLRCE employs the ICDSF-FA to focus the careers of junior faculty on biodefense research. Research topics pursued by ICDSF-FA awardees must be focused on the NIAID Category A, B and C Priority Pathogens with the long term intent of developing therapeutics, vaccines, or diagnostic devices or to advance basic knowledge of the mechanisms of disease. Investigators are to be mentored by established investigators of the Great Lakes RCE. Inter-institutional and/or inter-disciplinary mentorships are strongly encouraged. Mentors are intended to provide expertise and resources to the investigator to facilitate accelerated development of the research program. For assistance in establishing mentorship, please contact the GLRCE Associate Director, Navneet Bhasin, at nbhasin@bsd.uchicago.edu.

The ICDSF-FA also intends to foster collaborations among consortium investigators, specifically between basic and clinical research laboratories, between microbiology laboratories and investigators in other basic disciplines (i.e. immunology, cell biology, chemistry), or between academic and industrial partners. In addition, ICDSF-FA PIs should integrate the GLRCE Cores and Components as much as possible into their research plans.

WHO CAN APPLY

Applications from junior faculty members (fewer than 5 years experience at an academic institution) within GLRCE member institutions are welcome. Interested researchers from institutions not yet members of the GLRCE may also apply. By the date of the award, all GLRCE investigators awarded must reside in institutions that formally belong to the GLRCE.

SUBMITTING AN APPLICATION

The application (due October 13, 2008 at 5:00p.m.) should utilize the latest **non-modular** PHS 398 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)
- Letters of support from the proposed mentor as well as for those proposals involving collaborations with other GLRCE scientists, 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

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 ICDSP-FA proposals in the first week of November, 2008 to determine which applications will be recommended to the NIAID for funding through the consortium.

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 include the following areas:

- *Scientific merit* - Clear specific aims with well-referenced body of text; innovation or originality of proposed work; potential problems addressed; defined milestones; potential for continued/outside funding;
- *Complementarity to existing GLRCE programs* - Project use or enhancement of existing GLRCE resources;
- *Complementarity to the GLRCE biodefense mission* - Does project advance the long range plans of the GLRCE? Does project contribute to product development? Does the project apply a unique approach to the mission of the National Biodefense Network (<http://www.rcebiodfense.org/>)?
- *Past performance* of the Principal Investigator as well as the proposed mentor;
- *Environmental analysis*, including the institutional environment and its ability to provide the tools, equipment and research infrastructure to perform the proposed experiments.

FUNDING

This solicitation will result in the recommendation of three ICDSP-FA applications to the NIAID for funding, to begin on or about March 1, 2009, contingent upon the competitive renewal of the GLRCE. Awards are granted for a maximum of \$115,000 in direct costs per year, for up to a total of three years. ICDSP-FAs are evaluated on a routine basis, and their continued funding is dependent on satisfactory progress as judged by the GLRCE Executive Board. The Executive Board makes official GLRCE

program recommendations to the NIAID, whose RCE program officers ultimately approve continued funding.

GLRCE ICDSP-FA PROGRESS REPORTS

The progress of all ICDSP-FA will be closely monitored by the GLRCE Executive Board and the NIAID. Quarterly scientific and financial progress reports must be submitted to the Executive Board via Navneet Bhasin, Associate Director of the GLRCE, on March 1, June 1 and September 1. ICDSP-FAs 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 scientific/research issues to:

Navneet Bhasin, PhD
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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University of Chicago
920 E. 58th St., Suite 1117
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