

## Neurobehavioral and Psychosocial Factors

ADDENDUM UPDATE to NSBRI Research Announcement 99-02: March 27, 2000

**New Provisional Team Leader**  
**Replacing Nora Volkow, M.D.**

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**Solicitation Clarification: Neurobehavioral and Psychosocial Factors ONLY**

Some of the Neurobehavioral and Psychosocial Factors research questions in NSBRI Research Announcement 99-02 suggest that the major focus of submitted proposals should be on space-flight research. This emphasis was unintentional.

The NSBRI recognizes that, in general, for the next few years experiments developed to study neuro-behavioral and psychosocial factors associated with prolonged space flight must be designed to investigate key elements of individual and group stressors without access to astronauts in space. Thus, proposed projects involving the use of model systems to mimic the effects of microgravity or altered gravity, loss of geophysical cues, isolation, restricted mobility, confinement, boredom, performance demands, and other stressors are welcome and appropriate. Examples of such model systems include laboratory animal (rodents and non-human primates) studies of chronic intermittent restraint and crowded living quarters, and human studies of prolonged isolation of small groups associated with complex tasks (i.e., artificial in the lab, Antarctica, submarine duty), restricted mobility, and/or varying degrees of laboratory-induced or real-world stressors (e.g., cooperation with the Department of Defense's prolonged and stressful training of elite troops).

Proposals targeted toward neurobehavioral and psychosocial research questions should be, where possible, multidisciplinary, so that neurobiological and psychological changes can be evaluated concomitantly. In addition, studies that relate changes in the central nervous system to other organ systems may be particularly valuable. For example, in clinical investigations, women experiencing severe stress and depression have accelerated osteoporosis. Studies should be designed with the capability of predicting performance (e.g., do changes in stress hormones and peptides predict performance under stress?) and the discovery of effective countermeasures (e.g., medications that reverse the effects of stress on hormones and/or peptides that impair performance).

This clarification is meant for all prospective investigators, whether or not they missed the non-binding letter of intent deadline of March 17, 2000. All proposals submitted by the grant deadline of May 5, 2000 will undergo peer review (including those without a letter of intent).

For complete information on the research questions and how to apply, go to the NSBRI web page ([www.nsbri.org](http://www.nsbri.org)), select "NSBRI Research Announcements" and then "NSBRI 99-02." The full text of the announcement can be downloaded from the web site.