

**National Institutes of Health (NIH), DHHS - Funding Opportunity Announcement:
Biomedical Research on the International Space Station (BioMed-ISS) (UH2/UH3)**

Questions From / Answers To Potential Proposing Community

Most Current Update: [Wednesday, March 25, 2009.](#)

Next Update Targeted for Wednesday, April 1, 2009.

Question Number	Date Received	Date Posted	Question	Answer
1a	Tue, 10 Mar 2009	Wed, 25 Mar 2009	<p>The announcement indicates that a collaborative research between NASA and investigators (supported by NIH) will be available for competing. I am interested in writing one project to compete for the award. To select a proper project that can be translated from the lab to the ISS, my questions for you are:</p> <p>Do you allow the performance of (to perform alive) live mouse study in ISS to examine the tumor metastasis in mice?</p>	<p>ISS allows live mouse studies. The NIH BioMed-ISS FOA encourages innovative biomedical research on the molecular or cellular level. If you plan to submit live animal studies, you need to contact individual NIH institute's "Scientific/Research Contact(s)" listed under Section VII. Agency Contacts directly for an answer.</p>
1b	Tue, 10 Mar 2009	Wed, 25 Mar 2009	<p>Do you allow stem cells and T cells onboard ISS, and do you have the incubator to culture cells?</p>	<p>ISS has no limitations on the type of cells brought on board provided they are properly contained per the ISS safety requirements. All cells have to be approved by the Biosafety Committee, be free of adventitious virus, and have the appropriate containment level. Cells with extreme hazard risk (e.g. HIV infected) probably will have to remain contained for the entire mission, if they are allowed at all. It is recommended to avoid these for safety as well as the impending controversy in the event of an accident or breach of containment. As far as stem cells are concerned, several types--human, animal, and plant—have been flown. A list of</p>

Question Number	Date Received	Date Posted	Question	Answer
				laboratory equipment (including incubators, refrigerators, freezers, and centrifuges) is available at http://www.nasa.gov/mission_pages/station/science/experiments/Discipline.html
1c	Tue, 10 Mar 2009	Wed, 25 Mar 2009	Is anyone in your space center interested in studying gene therapy and stem cell gene delivery in ISS?	Information on experiments that have been conducted on the ISS and the principle investigators involved in them can be found at http://www.nasa.gov/mission_pages/station/science/experiments/Expedition.html However, the NIH BioMed-ISS FOA encourages investigator-initiated biomedical research on the molecular or cellular level. It is not a requirement to team up with anyone in the space center to send in an application to this FOA.
1d	Tue, 10 Mar 2009	Wed, 25 Mar 2009	Do you allow the transport of <i>[to bring]</i> a portable, battery-operated, small device to the ISS for performing DNA injection in the animals?	ISS allows portable, battery-operated devices for numerous applications provided they meet the safety requirements relative to batteries.
2a	Mon, 16 Mar 2009	Wed, 1 Apr 2009	I've read the NIH FOA for Biomedical Research on the ISS and have the following questions. Can you answer any/all of them? Section 1A & 1B: Government institutions (1A) and Civil Servant scientists (1B) are not eligible to submit. Are civil servants eligible to be co-I's? If so, does NIH cover their costs or does NASA?	<i>Response information in process.</i>
2b	Mon, 16 Mar 2009	Wed, 25 Mar 2009	Mid-Pg 8 of 37: Space-related studies fitting the mission of NASA Sponsored research programs such as human adaptation or human health countermeasures...are not	Applications to this FOA must be directly relevant to the NIH mission. If the Non-exploration research is relevant to the NIH mission and has the potential benefit of human

Question Number	Date Received	Date Posted	Question	Answer
			appropriate for this FOA. Are the more basic research studies of NASA's ISS Non-Exploration Research Program appropriate for proposing to NIH?	health on Earth, then it is acceptable to propose.
2c	Mon, 16 Mar 2009	Wed, 1 Apr 2009	Implementation Partners, pg 9 of 37: Can NASA centers serve as an implementation partner? If so, implementing partners submit costs to PI for inclusion in the proposal. If selected, does NIH provide funding to and expect to receive funding from the PI's institution? Or, does NASA fund the NASA Center component of the PI's budget?	<i>Response information in process.</i>
2d	Mon, 16 Mar 2009	Wed, 25 Mar 2009	Section V., ISS feasibility: NIH is indicated as the agency to assess the feasibility of conducting the proposed research under the special conditions of the ISS. Will they be utilizing NAS Center expertise in this activity?	The ISS National Lab Office and the ISS Payloads Office will assist NIH in evaluation of feasibility of conducting the proposed research on ISS.
2e	Mon, 16 Mar 2009	Wed, 25 Mar 2009	A significant fraction of the equipment on the list of laboratory equipment is not readily available for ISS usage, i.e., either not completely developed and flight qualified or no longer operational. Is there any NASA intent to provide funding to complete, upgrade, and flight qualify the equipment?	No, NASA funding is not available to complete, upgrade or flight qualify additional equipment for this FOA. Upgrade, certification or recertification costs for equipment must be included in the proposals as part of the implementation partners' costs.
2f	Mon, 16 Mar 2009	Wed, 25 Mar 2009	How are the resources of the ISS going to be divided up among existing programs like Life and Microgravity, HRP, Internationals, and the NIH and USDA?	ISS resources for the utilization of the space station are divided up by the ISS Chief Scientist through a defined prioritization process that reflects Congressional direction on the use of ISS, including National Laboratory.
3a	Tue, 17 Mar 2009	Wed, 25 Mar 2009	I have two questions on the Biomedical Research on the International Space Station	Information defining how a payload implementation partner requests to participate in

Question Number	Date Received	Date Posted	Question	Answer
			(BioMed-ISS) (UH2/UH3) program announcement: How does a payload implementer get on the list to participate in the Pre-application meeting referred to in the solicitation?	the pre-application meeting will be provided in the notification for the pre-application meeting which will be posted at http://grants.nih.gov/grants/guide/index.html in the next few weeks.
3b	Tue, 17 Mar 2009	Wed, 25 Mar 2009	How does a payload implementer provide information to be included on the website (http://www.nasa.gov/mission_pages/station/science/nlab/nlab_proposal.html) referred to in the Identification of Implementation Partners paragraph of Section I of the announcement?	All payload implementation partners will be requested to provide information on their capabilities (hardware, software and services) for the pre-application meeting. This data will all be posted to the identified website before the pre-application meeting under the NIH Biomedical Research on the International Space Station (BioMed-ISS) header.
4	Thu, 19 Mar 2009	Targeted for Wed, 1 Apr 2009	How many grants will <i>[be made by?]</i> the NIH?	<i>Response information in process.</i>
5	Fri, 20 Mar 2009	Targeted for Wed, 1 Apr 2009	Will NASA pull the plug on these grants? The research community is skeptical about the role of NASA.	<i>Response information in process.</i>