

**Soliciting Concept Papers for ISS Post-Graduate Innovation Awards in Space Life and Physical Science Research
(NRA NNJ14ZBG001N)**

Concept Paper Due: July 10th, 2014

This solicitation is targeted at Graduate Ph.D. students and Post-Doctoral Fellows who have never participated in any variations of space flight research and have no experience in designing ISS spaceflight scientific investigations. Student researchers who belong to the Experiment Program to Stimulate Competitive Research (EPSCoR) jurisdiction are strongly encouraged to participate. These concept papers will be for ground-based research that can be translated into ISS flight investigations in the following disciplines: Microbiology, Space Physiology and Physical Sciences specifically Combustion Science, Fluid Physics, Material Science and Complex Fluids. NASA Space Life and Physical Science research have several goals: (1) to effectively use the microgravity and other characteristics of the space environment to enhance our understanding of basic biological, chemical and physical processes; (2) to develop scientific and technological foundations for a safe, productive human presence in space for extended periods and in preparation for exploration; and (3) to apply this knowledge and technology to improve our nation's competitiveness, education and the quality of life on Earth. NASA Life and Physical Science experiments will be designed to discover how space flight affects a diverse group of microorganisms, plants and animals and study the effects of microgravity on both chemical and physical processes and specifically in the areas of combustion, fluid physics, complex fluids, and material science.

This solicitation is requesting the development of a concept paper describing ground based research that can be enhanced by flying in a microgravity environment on the International Space Station (ISS). Concept papers selected will have the opportunity to submit a full ISS flight proposal based on the merit of the research presented.

* The primary targets of this solicitation are graduate Ph.D. students and post-doctoral fellows at institutions from the NASA EPSCoR jurisdictions; however any US institution may submit a concept paper.

* Your specific aims must address the research emphases in this solicitation.

* The length of the proposal cannot exceed 5 pages using standard 12 point type.

* NASA anticipates that up to 10 awards will be given for concept papers that outline innovative research that is aligned with the priorities of the ISS program.

* The monetary value of each award will total up to \$4,000

* The period of performance for this solicitation is 4 months. Therefore, Notices of Intent are not required.

* The selected awardees will be invited to submit full ISS proposals on their research which may result in one flight opportunity for student researchers.

* For all EPSCoR jurisdictions, the proposal must be submitted by the jurisdiction's EPSCoR director.

NASA intends to sponsor studies that will result in new basic knowledge that will provide a foundation on which other NASA researchers and engineers can build approaches and countermeasures to the problems confronting human exploration of space, or that translate into new biological, chemical or physical science tools or applications on Earth.

All concept papers meeting the solicitation criteria will be evaluated for scientific and technical (implementation) merit by independent peer review panels. Proposed research judged to be of high scientific merit and feasible to implement will be evaluated for their relevance to programmatic needs and goals.



[Concept Papers for NASA ISS Post-Graduate Innovation Awards new!](#)[®]