

Life Sciences Flight Experiments Program

The NASA Life Sciences Flight Experiments Program (LSFEP) plans, manages and directs an active flight research program for Life Sciences investigations. Announcements of Opportunity are periodically distributed to the scientific community to select proposals for flight opportunities that are available. NASA performs scientific and engineering reviews of proposals and selects those with the greatest scientific value which can also be accommodated and performed in the spacecraft vehicles.

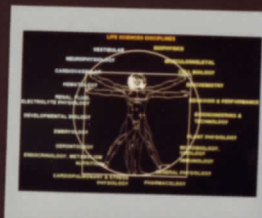
Basic Objectives of the LSFEP

- Insure human health safety, well-being and effective performance in space flight.
- Utilize the space environment to further knowledge in Earth medicine and biology.
- Utilize space technology and the space environment for application to terrestrial medical and biological problems.
- To understand the origin and distribution of life in the universe.



Life Sciences Research Areas

1. Entry into Space Environment
 - Motion sickness
 - Fluid redistribution
 - Cardiovascular deconditioning
 - Humoral and biochemical changes
2. Prolonged exposure to space
 - Demineralization of bones
 - Loss of body nitrogen and phosphorus
 - Ionizing radiation effects
 - Behavioral changes



Three NASA centers contribute to the program implementation:

- The Johnson Space Center (JSC) Life Sciences Project Division manages the Human Life Sciences experiments.
- The Ames Research Center (ARC) Life Sciences Project Office is responsible for non-human Life Sciences experiments.
- The Kennedy Space Center (KSC) Biomedical Office manages ground facility operations during preflight, ascent, and postflight support activities.

This display illustrates the functions of the JSC Life Sciences Project Division.