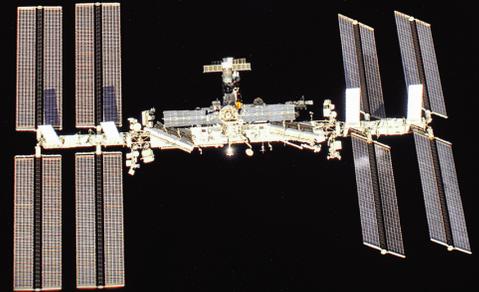




# Take Your **RESEARCH** to the **NEXT LEVEL**



## Biological and Physical Sciences Division

### BPS

Whether your objective is to support space exploration or to better understand a physical or biological phenomenon by subjecting it to the unique conditions of spaceflight environments, NASA's BPS division can help. For spaceflight experiments, our team of experts works closely with researchers—from preparing the experiments for space flight to developing hardware and software specifications for engineers; and from designing test plans to analyzing the data. BPS is with you every step of the way as you push the boundaries of your research.

### Our Mission

The mission of BPS is two-fold: to enable space exploration and to pioneer scientific discovery that benefits life on Earth. The two core programs that BPS supports are:

#### Space Biology Program

- Solicits and conducts research to understand how biological systems accommodate to spaceflight environments.

#### Physical Sciences Program

- Solicits and conducts research to understand how physical systems respond to spaceflight environments, particularly weightlessness.



## How BPS Can Support Your Research

BPS provides researchers, internal NASA customers, agency partners, commercial industries, and international organizations with the scientific data, knowledge, and facilities required to optimize outcomes by:



### Awarding Research Grants

Grants to academic, commercial, and government laboratories are the core of BPS's research and technology development efforts. All BPS solicitations are issued through NSPIRES and all awards are described and results tracked in the Task Book.



### Providing a Range of Experimentation Platforms

In many cases, BPS uses one or more ground-based research platforms, or stepping stones, to prepare for a spaceflight experiment. Judicious use of the stepping-stone approach can accelerate progress and reduce costs for many research and technology development projects.



### Assembling Experts and Integrating Results

BPS strives for broad involvement of the research and technology development communities in the formulation and dissemination of its work. BPS increasingly solicits teams of investigators for spaceflight investigations to maximize the scientific benefit derived from the experiments. BPS also emphasizes the importance of archiving data, metadata, computational tools, and samples after spaceflight experiments to enable future experiments.

## RESOURCES AT-A-GLANCE

There are many ways to work with NASA. Here are a few key resources to help you learn about research opportunities, submit proposals, apply for funding, and learn about experiments in your field:



#### BPS website:

[science.nasa.gov/biological-physical](https://science.nasa.gov/biological-physical)  
Portal for related NASA resources, proposal solicitations, news and articles



#### BPS Task Book:

[taskbook.nasaprs.com](https://taskbook.nasaprs.com)  
Online database of BPS-supported research projects



#### GeneLab:

[genelab.nasa.gov](https://genelab.nasa.gov)  
Comprehensive space-related omics database



#### Physical Sciences Informatics (PSI) System:

[psi.nasa.gov](https://psi.nasa.gov)  
Data repository for physical science experiments performed on the International Space Station (ISS)



#### Life Sciences Data Archive (LSDA):

[lsda.jsc.nasa.gov](https://lsda.jsc.nasa.gov)  
Data and biospecimen repository from studies on a wide range of organisms ranging from bacteria to astronauts



#### NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES):

[nspires.nasaprs.com](https://nspires.nasaprs.com)  
Solicitations for grant proposals\*



#### Small Business Innovation Research (SBIR):

[sbir.nasa.gov](https://sbir.nasa.gov)  
Programs for small business concerns that support the research, development, and demonstration of innovative technologies



#### Established Program to Stimulate Competitive Research (EPSCoR):

[nasa.gov/offices/education/programs/national/epscor/home](https://nasa.gov/offices/education/programs/national/epscor/home)  
Program designed to stimulate aerospace and aerospace-related research in jurisdictions that have not in the past participated equably in competitive aerospace and aerospace-related research activities



#### Space Technology Mission Directorate (STMD):

[nasa.gov/directorates/spacetech/home](https://nasa.gov/directorates/spacetech/home)  
Programs and solicitations focused on advancing technologies and testing new capabilities

\*Register with NSPIRES to receive notifications on upcoming BPS/Human Research Program solicitations: 1. Create an ORCID ID (if you don't have an existing one) at [orcid.org](https://orcid.org); 2. On the NSPIRES site, click on the "Create an Account" button; 2. After you've created an account, select "Account Management" on your user page; 3. Click "Email Subscriptions"; and 4. Select the "Human Exploration and Operations Mission Directorate" General Subscription List option.