NASA IDAHO

SPACE GRANT CONSORTIUM

PROGRAM UPDATES

INTERNSHIPS

Idaho-Based Internship

9 Summer

NASA Internships

10 Summer

3 Fall

2 Spring

This Spring, we funded our 100th internship since Summer 2020.

Caeley Hodges (Summer ‘24 intern, NASA Intern Fall ‘24) awarded the Brooke Owens Fellowship.

The Brook Owens programs are designed to serve both as an inspiration and as a career boost to capable young women who aspire to explore our sky and stars, advance the aerospace industry, and help their fellow people here on planet Earth.

Do you have any students that are soaring?
We’d like to share these successes with our Representatives in D.C.

HIGHER EDUCATION AWARD UPDATES

Techniques for connecting

- *Breaking STEM Barriers: Enhancing STEM Education and Workforce Development in Idaho Through An Interactive Learning Platform –*
  P.I. T. Bland, University of Idaho
- *Using NASA-patented Randtl-D Wing Technology for Design, Build, Fly Competition –*
  P.I. V. Durgesh, University of Idaho
- *Student-Led CubeSat Development -*
  P.I. K. Wilson, Idaho State University

K-12/INFORMAL EDUCATION AWARD UPDATES

Techniques for connecting

- *Growing the STEM After-School Programs* - P.I. R. Smith, Growing the STEM
- *Idaho Partnership for Climate Change Engagement* – P.I. A. Gabrielli, City of Boise, The WaterShed
- *Planetarium & Field Trip Experiences for Title 1 Schools* - P.I. P. Baker/Amy Costello, Children's Museum of Idaho
- *SEE Camp: S2 – Science & Engineering Exploration Camp Season 2* – P.I. F. Eishita, ISU
- *Declo – Cassia: K-12 STEM Advancement Initiative* – P.I. D. White, Cassia K-12 School

Student-led Cubesat Development

P.I. K. Wilson, Idaho State University

Project Summary

The ISU Space Initiative has been actively developing a CubeSat designed to be deployed from a rocket reaching an altitude of 10,000 feet.

Our team has been conducting extensive research and comparing various components to ensure the best chance of success.

The main objective of this project is to gather agricultural data by deploying the CubeSat separately from the rocket.

Equipped with a thermal camera, the CubeSat will analyze watering patterns in the area while also collecting data on magnetic fields, temperature, gravitational forces experienced during flight and descent, and video footage.

Looking Forward

We plan to design and 3D print the CubeSat's structure to securely house all critical sensors and components.

Additionally, we are exploring separation mechanisms that allow the CubeSat to detach independently from the rocket.

This ensures that we can capture stable video in a controlled descent for more data collection.

Our ultimate goal is to refine this system such that we can showcase it in the 2026 Spaceport America Cup.

PROVEN IDAHO PROGRAMS

- BSU NASA Artemis Challenges Teams
- iSPACE: Idaho K12 STEM/NASA Pathways, Activities, Collaboration, and Engagement
- NNU RockSat Program