



# ESIP Lab

## SUPPORTING DEVELOPMENT OF EARTH SCIENCES CYBER-INFRASTRUCTURE

**MISSION:** The ESIP Lab empowers the scientific community by supporting ideation, incubation and evaluation of Earth sciences cyberinfrastructure.

*What is distinct about the Lab within ESIP?*

The Lab supports solution-oriented projects that have discrete development periods and associated budgets.

*How does the Lab benefit the ESIP community?*

The Lab embodies the core ESIP principal of fostering collaboration across agency and institutional boundaries. It is a place to try something new, fail in a low stakes environment, expose developing technology to domain experts through project evaluation, or come up with new solutions through facilitated ideation.

## LAB PROGRAMS

### Idea Farm

The ESIP Lab hosts member-driven ideation challenges and prize-competitions (See an [example](#) ideation challenge). These problem-solving events include idea, creative, technical and scientific competitions in which the ESIP Lab invites the public's help to solve perplexing data-centric problems. Challenges are meant to reach a broad community of solvers who may approach the stated problem from a new perspective than has already been discussed inside the ESIP community. Competitions range in their awards from \$5,000 - \$10,000.

### Incubator

The incubator is a space where members can receive funding to explore new technologies, standards, services, workflows, protocols and best practices (See an [example](#) incubator project). Projects enter the incubator through a Request for Proposals and are reviewed by a community-led panel. Incubator projects typically last 6 months and can receive up to \$7,000. This funding is generally seen as seed funding not intended to fully fund entire projects. Incubator projects have deliverables, are meant to be reusable by the community, and have open-source licensing on any new code.

### FUNding Friday

FUNding Friday is an annual competition held at the ESIP Summer Meeting. ESIP members (as individuals or teams) create a poster explaining an ESIP-relevant idea during a Thursday-night



networking event, the next morning they pitch their poster to meeting attendees, who then vote on the posters (See 2016 FUNding Friday [Submissions](#)). \$5,000 awards are given to the posters that receive the most votes. Student posters are judged separately, with an award of \$3,000.

## **Evaluation**

ESIP Lab coordinates independent evaluation of technologies using an internally-developed Technology Evaluation Framework (TEF). The TEF is the process ESIP follows when conducting project evaluations, including the selection of evaluators, creation of test plans between project teams and evaluators, managed communications between project teams and evaluators, and coordination of writing final reports. While evaluation can be utilized at various stages of the development life cycle, it may be most useful at tackling the “valley of death” between technology development and infusion. Evaluators have received an honorarium between \$2000 - \$5000 for their time.

## **ESIP LAB STRUCTURE**

### **Governance**

The ESIP Lab governance is evolving and will ultimately be determined by ESIP community input.

### **ESIP Staff Support**

ESIP will have a dedicated ESIP Lab Director. The Lab Director is responsible for:

1. Informing the ESIP community about Lab services.
2. Grant writing to support the Lab.
3. Point of contact within ESIP for Lab projects.
4. Administrative support (web hosting, cloud services and invoices.)
5. Project facilitation (telecons, call mediation)
6. Providing access to ESIP resources
7. Champion the Lab within the larger scientific community.

### **Resources**

- AWS cloud computing resources
- Travel support
- Collaborative platforms
- ESIP community