

Potential NIMO Host Institution Profile

Institution/Department

Name

Foundation for Earth Science

Background

The Foundation for Earth Science (FES) is a non-profit organization whose mission is to advance Earth science information best practices in an open, transparent fashion. To achieve this goal, we foster collaboration among scientists, academic institutions and research laboratories that are addressing some of the fundamental questions about Earth.

FES uses collective impact to facilitate partnerships, strengthen collaborations and promote innovation across Earth science research, data and technical communities. This approach drives the field of Earth science forward by encouraging and inspiring individuals and organizations to work together to find and adopt new solutions to pressing issues in Earth, environmental and data science.

Principal Investigator Candidate

Name

The important benefit of collaborating with an organization like FES is that it is not person dependent. Any IM may be hired by FES and act as a PI for NIMO. This would alleviate the problem of having a single IM at each University with no guarantees of leadership continuity. I (Corinna Gries) would be willing to work with FES.

Current Position

Background

Prior LTER Network Service and Leadership

Institutional Infrastructure

Technology

FES provides technology stacks based on need of the group and would be open to supporting what LTER IMs need. As an example, for testbed activities, this generally includes utilizing cloud-based solutions like Amazon Web Services and leveraging distributed university computing resources by members.

FES has developed and maintained collaborative spaces using MediaWiki, Wordpress and Drupal to keep communication flowing and provide an open forum for exchanging best practices, experimenting with new technologies and allowing the entire Earth science and data communities to leverage shared expertise. FES continually looks for ways it can better support online communities and enable them to be as productive as possible. In addition, FES provides basic communication support employing WebEx Web Conferencing to support telecons, live presentation streaming and remote participation for in person meetings with video, screen-sharing and audio capture for our communities.

We strongly feel that this LTER data management organization should first define its needs, requirements, and specifications for technological infrastructure and skills. FES is well situated to facilitate and establish

appropriate collaboration and hire staff to best serve the needs without forcing NIMO into an existing infrastructure framework. Furthermore, employing off-site collaborations make this organization more nimble and responsive to change when only skills need to be moved rather than hardware.

Non Technology Support Services

FES acts as a fiscal sponsorship, or program incubator, as an effective and efficient mechanism for seeding new projects or supporting existing projects that benefit the Earth science data and research community and delivering services to those in this community. The fiscally sponsored project becomes a program of the FES and is a fully integrated part of the FES who maintains all legal and fiduciary responsibility for the sponsored project, its employees and activities. Any work product is available to the public or to the charitable sector. FES assures funders that the purposes and any restrictions of all grants and/or contributions will be met and these will further the tax-exempt purposes of FES. This includes the ability to develop and maintain independent budgets, deliver financial reports to the community and sponsors. Unlike universities, FES charges a small indirect rate, 19.06%, to ensure that much of the funding goes to direct work of the project.

FES has received funding from NASA, NOAA, EPA, sponsorship from companies, subcontracts from universities and funding from private foundations – Moore and Sloan. FES has the accounting infrastructure to support distributed communities of practice, enabling collaborative funding models that enable and don't divide groups and using money efficiently. If FES was chosen to support the LTER IMs, FES is ready to tackle the administrative, accounting and business needs. LTER would be empowered to hire community managers or project specific collaborative support through FES.

FES identifies, plans and supports trainings and workshops for the Earth and data science communities in areas that are traditionally not covered by other community organizations. These in-depth trainings are designed to help scientists expand their knowledge, work more efficiently and better communicate their research. Past offerings include a training workshop introducing the Agile software development and leadership methods to ESIP meeting attendees and a two-day Software Carpentry Bootcamp to teach basic lab skills for scientific computing, such as Unix Shell, Python or R, SQL, and Git and Github. These bring together Earth science data and technology experts to exchange current understanding on trends and technologies and share expertise across the Earth science domain, functional and cross-sector communities. Meetings are an essential tool to build and sustain community, allow community-driven collaborations and have extended periods of face time to advance the projects serving the Earth science community as a whole.

FES helps institutions, projects and scientists develop their online presence and strategize and create communications and outreach initiatives. FES uses social networking infrastructure to facilitate ways for people to connect, collaborate, share and discuss work in an online environment. We also use these platforms to increase awareness of events and opportunities, such as the ESIP Federation annual meetings and the Raskin Scholarship.

In addition to FES's technical and non-technical support services, FES has cultivated and maintained the Federation of Earth Science Information Partners (ESIP), with over 170 member organizations across the data lifecycle. LTER IM's have collocated a meeting at a past ESIP meeting. This is an opportune vehicle to leverage the larger Earth science data and technology expertise. LTER is an ESIP member as well as NCEAS, LTER's new communication office.