Potential NIMO Host Institution Profile

Institution/Department

Name

University of Wisconsin, Madison, Center for Limnology (CFL)

Background

The Center for Limnology's vision is to provide local, national, and international leadership and maintain excellence in the fields of limnology, aquatic ecology, and ecosystem science. As a globally recognized leader in ecological research, the CFL has infrastructure designed to support large, multi-institutional initiatives that span disciplines and international borders.

Principal Investigator Candidate

Name

Corinna Gries, PI

Paul Hanson, co-PI

We feel that it is important to have two people at one institution because it would be known from the onset who might take over PI duties, in case the original PI leaves. In preparing the organizational structure for NIMO we discussed at length the fact that an NSF grant is generally a contract with the institution, not the PI, and if the PI (local IM) leaves the institution it is up to the LTER site to hire a replacement. In that situation no guarantees are made that that person will be able and willing to fulfill the PI role. Hence, the cooperative agreement for NIMO may default to anyone at that particular LTER site's or institution's leadership which may cause a change in priorities and direction.

Current Position

Gries - North Temperate Lakes LTER Information Manager – Senior Scientist

Hanson - Distinguished Research Professor, UW Center for Limnology

Background

Gries – I have been LTER Information Manager since 2002, first serving CAP LTER and now NTL LTER. In addition, I have had continued NSF funding as PI or co-PI, leading software development, software implementation, research support, and a large collaborative projects. Accordingly, I have experience in envisioning future directions, budget and human resource management, decision making, and collaboration with a large number of institutions and co-PI. The latest project (NSF ADBC TCN) is probably the best model for an organization like NIMO with 17 collaborating institutions, each having their local PI who is managing their respective operation. As PI I have facilitated development of a strategic plan and coordinated approaches and procedures interacting with a committee of co-PIs to assure a cohesive final product.

I already have a good working relationship established with the LNCO co-PIs at NCEAS as well as other large cyber infrastructure and data providing projects.

As many LTER IMs know this reorganization of LTER Information Management has been on my mind for several years now. My thinking has been inspired by communities as varied as the LTER IM, the international grass roots organization GLEON (Global Lakes Ecological Observatory Network) and the natural history community, all of which have slightly different but similar information management needs.

Hanson – I have focused most of my research at the seam between science and technology. My students have almost exclusively been from engineering and computer science, and I have learned and demonstrated the value of cyber-infrastructure in support of the question-model-data triad that is fundamental to science. I have been awarded a large CI grant (NSF, Cyber-enabled Discovery and Innovation). My continued commitment to the concomitant advancement in technology and science is reflected not only in my publication record, but also in my growing collaborations with major data providers, including CUAHSI, DataONE, the USGS, as well as other federal organizations and NGOs.

The seam between science and technology is prominent in an international grassroots network that I co-lead with Kathleen Weathers (Carey Institute for Ecosystem Studies) -- the Global Lake Ecological Observatory Network (GLEON). This grassroots network of more than 500 scientists from >50 countries struggles with many of the same issues that will be confronted by NIMO, and the solutions are both technical and cultural in nature.

Finally, I have been involved with LTER as an Information Processing Consultant (1992-1998), as a graduate student (1998-2003) and as a faculty member (2003-Present). I will never forget my first meeting with LTER IMs in Estes Park 12 years ago, when Barbara Benson introduced me to the IM community. It struck me then, and has stayed with me since, that the IMs are the exemplar of the "network" component of LTER. Regardless of who among the IMs ends up leading the NIMO effort, I am thrilled to see the fate of NIMO in the deserving hands of this community!

Prior LTER Network Service and Leadership

Gries: Member of IMExec 2004 – 2006, IM co-chair 2006 – 2009 and 2015 – 2018, IM representative to the EB 2008 – 20011.

Hanson: NISAC science chair 2013 - 2015

Institutional Infrastructure

Technology

The CFL has general user and web support, system administration, and remotely running applications (mostly modeling) on the University's HTCondor system. Condor High Throughput computing is available to all UW projects free of charge. Furthermore, we already have established collaborations with the Advanced Computing Initiative (http://aci.wisc.edu/) on campus and an NSF funded CloudLab (Wisconsin Institute on Software-defined Datacenters Of Madison (WISDOM)) is currently being established promising opportunities for collaboration. However, we strongly feel that this LTER data management organization should first define its needs, requirements, and specifications for technological infrastructure and skills and then establish appropriate collaboration and hire staff to best serve the needs, rather than become part of an existing infrastructure where solutions may be adapted to skills and infrastructure available. Furthermore, employing off-site collaborations make this organization more nimble and responsive to change when only skills need to be moved rather than hardware. Accordingly, we are confident that either UW Madison, or preferably other, yet to be determined, collaborators will provide the optimal technical infrastructure.

Non Technology Support Services

The Center provides excellent administrative support for submitting proposals and managing grants and contracts. In addition, overhead covers accounting, human resources management, travel, and meeting organization support. The university provides meeting space free of charge and very affordable accommodation. Of course, we also have a field station that during the off-season can easily accommodate a group the size of the current IMC in a beautiful setting and modern meeting rooms.