Potential NIMO Principal Investigator and Host Institution Profile

Principal Investigator Candidate

Name
Philip Tarrant

Current Position
Director of Informatics and Technology. In this role Tarrant is responsible for all the technology needs of the Julie Ann Wrigley Global Institute of Sustainability. The Institute hosts ASU's School of Sustainability, multiple large research initiatives, and coordinates an interdisciplinary community of over 350 sustainability scientists and scholars.

Background
Tarrant has worked in various technology roles since 1984, first for IBM and then in the wireless industry. He returned to academia in 2002 as a student and went on to work in biological and ecological research and research data management. He has experience of managing teams of up to 45 people in fast moving service environments as well as managing multi-million dollar technology and business improvement projects.

Prior LTER Network Service and Leadership
- 2010-2015 Information Management Committee
- 2012-2013 IM exec
- 2013-present IMC chair/co-chair

Prior Project Management Experience
Tarrant has been managing major technology projects for over 20 years. Examples include:

- Business improvement program for an 1100 person I.T. service business unit.
- Process and system improvements in the core network of a large wireless provider, including the design and delivery of three major releases of in-house planning software, one of which introduced over 100 new users to the system.
- The design and development of a new transmission planning system, which required managing a remote programming team based in New Zealand.
- A major customer satisfaction business re-engineering project. Developed the approach to achieve this objective and managed the team responsible for delivery.
- Manager of a technical service operation. Transformed an underperforming department, reducing head count by 30%, while improving employee morale and customer satisfaction. Supervised forty-five engineers and service personnel.
- A tri-university project to improve research data management collaboration within the Arizona public university system.

Institution/Department

Name

Julie Ann Wrigley Global Institute of Sustainability, Arizona State University, Tempe Arizona. (sustainability.asu.edu).

Background

The Julie Ann Wrigley Global Institute of Sustainability (GIOS) is the hub of Arizona State University's sustainability initiatives. GIOS advances research, education and business practices for an urbanizing world. Its School of Sustainability, the first of its kind in the U.S., offers interdisciplinary degree programs focused on finding practical solutions to social, economic and environmental challenges.

The Institute also provides support services for over 350 Sustainability Scientists and Scholars, including: informatics assistance, data curation and publishing, web design and development, and other services. Institute projects include the Central Arizona-Phoenix LTER, the Decision Center for a Desert City, the Walton Sustainability Solutions Initiative as well as other large research endeavors. Our university-wide commitment to sustainable operations encompasses all four campuses.

Institutional Infrastructure

Technology

GIOS has a robust project and data management infrastructure that could supplement, when necessary, the NIMO personnel and technology. The GIOS Informatics and Technology team consists of seven technologists (supported by student programmers) and a director. Additional university technical resources support the activities of this core group.

GIOS uses a computing solution based on virtual Linux servers, with storage space on Netapp filers for its own projects. The research databases and web servers are hosted on these virtual machines, which bring the advantages and economies of scale of professional IT facilities to both small and large research projects. As well as providing significant computing resilience, the server facility allows staff to maintain proper backups of the stored data to meet short-term data-protection needs. All data systems and web applications are password protected and ASU staff perform regular security sweeps.

In addition to this server infrastructure, ASU has large scale computing facilities based on high performance computing, petabyte storage capacity and a collaboration-centric hybrid cloud, with open frameworks. Inter/intra-university high-speed 10G/40G/100G transmission is via the Internet2 Innovation Platform. OpenFlow based software-defined networking provides efficient and effective touch-less network management free from bottlenecks.

Non Technology Support Services

GIOS has dedicated resources available to affiliated projects in the form of proposal writing services, talented writers and graphic designers, human resources professionals and full business support including travel services, fiscal management and grant administration.