Potential NIMO Host Institution Profile

Institution/Department:

Name: University of New Mexico/Department of Biology

Background:

The UNM Department of Biology has long had ties to the LTER Network. It has been the home of the Sevilleta LTER since 1988. The LTER Network Office (LNO) was part of the department for many years. A PI and the information manager from the McMurdo LTER are also part of the department. Several faculty members and many graduate students conduct research as part of the Sevilleta LTER on everything from cryptogamic soil crusts to grasshopper herbivory to ecosystem carbon flux.

Principal Investigator Candidate

Name: Kristin Vanderbilt

Current Position: Associate Research Professor, Department of Biology

Vanderbilt serves as the information manager for the Sevilleta LTER. She has been a signatory PI on the last three Sevilleta LTER proposals.

Background:

Vanderbilt's education and early work experience reflect her interest in biology. She has a B.S. in Biological Sciences (minor: Chemistry) from Colorado State University, and an M.S. in Biological Science from UT-Austin, where she studied the reproductive ecology of a prairie perennial. Between graduate degrees, Vanderbilt spent three seasons supporting the National Park Service's Inventory and Monitoring program as a field botanist in Glacier National Park and Canyonlands National Park. She then obtained a Ph.D. in Forest Science (emphasis: biogeochemistry) in 2000 from Oregon State University. She analyzed long-term stream chemistry and forest production datasets from the H.J. Andrews LTER for her dissertation. She received an NSF International Postdoctoral Research Fellowship to study forest soils at an International LTER (ILTER) site in Hungary.

The Sevilleta LTER hired Vanderbilt as research faculty and information manager in 2000. She has now been the SEV IM for fifteen years. In addition to her duties as IM, she has contributed to several journal articles and book chapters on LTER information management topics. She has also co-taught introductory ecological information management workshops for many audiences, including junior faculty, post-docs and library scientists.

Prior LTER Network Service and Leadership:

As a graduate student at the HJ Andrews LTER, Vanderbilt's first major service to the LTER was co-organizing a five-day visit by twelve graduate students from Taiwan and Japan to the HJ Andrews LTER and Wind River Canopy Crane research sites. Once she became the SEV IM, she continued to serve the LTER by being involved in LTER network-level activities. She has served two terms on IMEXEC, and one

on NISAC. She participated in the Metadata Management Suite Tiger Team during the development of PASTA, and is a member of the LTER Controlled Vocabulary and Drupal Ecological Information System (DEIMS) working groups.

Much of Vanderbilt's service and leadership experience has been in the context of the ILTER. She joined the US ILTER Committee, the body that liaises between the ILTER and the US LTER Network, in 2001. In the following years, she co-organized and co-taught several ILTER Information Management workshops for groups of scientists and students from Eastern Europe, Africa and Asia. She was the first chairperson for the newly formed ILTER Information Management Committee from 2006 to 2010. As such, she co-organized two ILTER information management workshops in China that focused on the development of a multilingual ILTER data catalog. She served as the co-chair of the US ILTER Committee from 2010 to 2014. She chaired the organizing committee for the annual NSF Minisymposium in 2013 when the topic was ILTER collaborations, and also gave one of the talks during that event. As a service to the US LTER and ILTER, she co-organized with Evelyn Gaiser (FCE PI) a special issue in *Ecosphere* highlighting research in the ILTER.

Institutional Infrastructure

Technology:

UNM Information Technologies (UNM-IT) offers a wide array of services to the UNM community. Highlights of the services potentially most relevant to NIMO are noted below.

UNM-IT maintains software to support collaboration. Skype for Business (Lync) is available for desktop sharing and audio-video conferencing. Adobe Connect is also available on campus for hosting online meetings. UNM-IT negotiates free or discounted software prices for UNM personnel. Office 365 ProPlus and Matlab, for instance, are free for students, faculty, and staff. Sharepoint Online is available to the UNM community and makes 1 TB available to each user to share files with others within the university or externally.

With respect to infrastructure, UNM-IT maintains a network backbone speed on campus of 1 gigabit/second. UNM-IT also provides high-performance research connectivity to Internet2 and research labs via the ABQ GigaPoP, an aggregation point of networks. UNM's supercomputer center, the Center for Advanced Research Computing (CARC), offers substantial computing resources to all researchers at UNM. CARC has 15 Tflops compute power and approximately 1 PB of storage.

The Research Data Services (RDS) branch of the UNM University Libraries helps UNM researchers with digital data management, curation, and archiving. RDS personnel have worked with Vanderbilt and Mark Servilla (LNO) to develop a mechanism for harvesting Sevilleta LTER datasets from PASTA into LoboVault, UNM's own archive.

Finally, ownership of hardware that hosts PASTA at the current LNO will revert to the Department of Biology when the LNO is decommissioned. NIMO could continue to employ these servers, obviating any immediate need to move PASTA to a new location.