

2007-2008 Smathers Libraries Mini Grant

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Additional applicants, please give name and email for each:
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Title of grant:
 Developing a Database to Foster Interdisciplinary Communication and Collaboration at UF.

Project abstract (no more than 100 words):
 This proposal requests funding to implement VIVO, a tool with the ability to improve access to faculty publications and to strengthen communication channels between departments, colleges and the library. VIVO is a search engine created by Cornell Libraries and displays faculty and department information harvested from a variety of sources. The seed funds received from the mini-grant will be used to hire one student assistant to input data for a select number of departments. Once populated, VIVO will serve as a promotional tool to recruit campus support, as well as allow the Libraries to explore the dynamic harvesting of data.

Funds requested (Limit of \$5,000): \$5,000.00

Describe how the 10% mandatory cost share will be met: Sara Russell Gonzalez will contribute \$48,175 at .104 FTE = \$500.00

Please list the library resources to be used in this project and the name of the person authorizing the intended use and date authorized. If you need more room, continue on a separate page.

Resource	Authorizing Individual	Date Authorized
MSL Computer Services office will designate one computer for use by student.	Pam Cenzer	09/21/07

I have my Department Head's approval to submit this application. Yes No

Valrie Davis 9/21/07
 Signature Date

1. Project Description and Objectives

This proposal requests funding to implement VIVO, a tool with the ability to improve access to faculty publications and to strengthen communication channels between departments, colleges and the library. VIVO (<http://vivo.cornell.edu>) is a search engine created by Cornell Libraries and is offered free to academic institutions. VIVO displays faculty and department information harvested from a variety of sources, including the Office of Sponsored Research, Human Resources, the Registrar, and subscription databases such as Web of Science, PubMed and Biosis. Based on an ontology model that establishes relationships between information entities, VIVO is advantageous because it allows for greater hyperlinking and does not require ground-up programming to begin implementation. The information displayed in VIVO includes course information, research interests, publications, grants, and more, and includes links to university web pages and full-text articles provided by the databases. In cases where information is not available for dynamic harvesting the information is manually inputted, such as with faculty information or an individual's research interests. At the present two other institutions, Kansas State University and SUNY Buffalo, are exploring VIVO.

Currently, several UF academic departments receive publication lists as a static web page from their library subject liaison, or, as in the case of the College of Agricultural and Life Sciences (CALs), struggle in-house with the task of asking faculty to manually input data into a home-grown system (UNIFAS) not designed for public consumption. Asking faculty to manually input citations creates accuracy issues and limits full-text linking, and there is a need at UF for departmental publication lists that require less faculty time and energy. Not only is VIVO an opportunity to combine the work of individual librarians with the publication needs of academic departments, it is also a chance to foster connections between the library and academic departments and increase communication across departments and research areas. Academic departments also struggle with the recruitment of new students; as a resource available to the general public, and searchable by research topic, VIVO can assist in recruitment of new graduate students, postdocs, and faculty, as well as aid undergraduates in locating research advisors and identify potential future areas of study while simultaneously highlighting UF's unique community of scholars. VIVO has the ability to display recent grant awards and publications, whereby increasing access to UF research by supplying links to full-text within databases and, with future VIVO versions, potentially, to the Institutional Repository (IR). Currently the Digital Library Center is exploring the use of the Fedora digital content system for the IR. The upcoming VIVO upgrade is expected to more easily interface with Fedora, making interaction with the IR a possibility. An additional benefit includes increasing the visibility of seminars and events on campus to the UF community and general public. Lastly, VIVO is an opportunity for increased

institutional partnerships with Cornell, Kansas State, SUNY Buffalo, and future adopters of VIVO.

David Lewis, in his article *A Strategy for Academic Libraries in the First Quarter of the 21st Century*, attempts to outline the steps he feels libraries must take in order to continue to be a valued contributor to the campus community. One of these steps is to "Reposition library and information tools, resources, and expertise so that they are embedded into the teaching, learning, and research enterprises. This includes both human and, increasingly, computer-mediated systems. Emphasis should be placed on external, not library-centered, structures and systems." (420). Library resources such as the Institutional Repository (IR) are certainly not library-centric and have placed special weight upon university-wide scholarship; VIVO can take this idea of embedding what libraries do into the teaching, learning and research community a step further by tying together the university scholarship found in the IR and in the research databases, and placing it within the larger context and structure of the UF community.

There are many skills unique to the library, such as knowing how to organize data and produce accurate, harvested publication lists, that would make VIVO a valuable library initiative. As the library is central to all research activities of the university, with every department assigned a subject liaison, the library is both unique to all other organizations on campus and in a position to implement a project such as VIVO. Harvesting publications from databases and displaying them in VIVO would support the overall mission of the George A. Smathers Libraries "to meet the information needs of the University of Florida community by providing access to all relevant forms of recorded knowledge" while simultaneously creating an excellent marketing tool and avenue for outreach for the library.

The Libraries have begun manually populating a UF Version of VIVO (<http://ufl.mannlib.cornell.edu>) with faculty from three departments: Astronomy, Food and Resource Economics, and the Marston Science Library. This test database is currently hosted by Cornell and this will be continued throughout the duration of the mini-grant. The seed funds received from the mini-grant will be used to hire one student assistant to manually input data for a select number of departments. Manual inputting is an important first step in order to procure an understanding of the ontology model and the unique structure of UF, where every department is structured differently. Once populated with the 28 departments, VIVO will serve as a promotional tool to recruit department and administrative support, as well as allow the Libraries to explore the dynamic harvesting of data.

The resulting database will be presented at a Faculty Senate meeting, intended to increase campus-wide support and funding for the project, and will also be used to apply for grants from the National Science Foundation or Library Services Technology Act.

2. Project Plan

We propose to begin populating the VIVO database focusing on the 28 science departments inside the College of Liberal Arts & Sciences (CLAS) and the Institute of Food and Agricultural Sciences (IFAS) (see Table 1). The data we plan to collect and input into VIVO include:

Faculty Profiles - Each personal profile will contain a name, title/rank, link to personal website or department profile, email address, research description, and picture if available. The profile information will be collected from department and personal websites. For IFAS members, we also have the option of using their report database UNIFAS to retrieve this information. The record for each faculty will also contain links to department affiliation, publication, course, and grant records that are separately inputted into VIVO. We will include both tenure and non-tenure track faculty in this early implementation of VIVO. The OPS hire will be responsible for inputting these profiles, once the department and sample faculty member is created by Davis or Gonzalez. VIVO contains the ability to clone a record and from our preliminary work, we have found that it takes between 2-4 minutes to manually enter the faculty data. With an approximate number of 1500 faculty members in the 26 departments (not including Astronomy and FRED), we estimate that it will take the OPS hire, at 0.375 FTE, 8 weeks to enter in the faculty profiles.

Unit Profiles - We categorize colleges, departments, centers, and libraries as units. The department profiles will contain a picture if available, address, link to department website, link to library liaison, link to appropriate college, and list of linked faculty that comprise or are affiliated with the unit. College profiles contain a list of linked member departments, a link to the college website, and an overview description. Center profiles contain links to the parent college and affiliated departments, description, and link to center website. We are including the George A Smathers Libraries in this test implementation of VIVO because we plan to fully integrate library services liaisons into VIVO from the beginning. The library profiles will be similar to the department profile but the description will also contain links to the library catalog and help services.

Facilities - Many departments at UF have affiliated facilities, such as laboratories and telescopes, that may be of interest to researchers outside of the department but are unknown without delving through department websites. We will include profiles of these facilities with description, link to website if available, image if available, department/center affiliation, and contact information.

Courses - One of the considerations with displaying courses is to decide whether to display potential class listings from the Undergraduate and Graduate Course Catalogs or to dynamically harvest scheduled classes from the Registrar's database that vary every semester. Many faculty list the classes that they regularly teach in their profiles and we will begin testing this category using these course titles and descriptions, linking them to the appropriate faculty member.

Seminars - The category seminars includes both department and university-wide seminars. While the future dynamic version of VIVO will likely draw in events from the UFL Calendar of Events, we will initiate this category by creating links to department seminar websites. VIVO contains the ability to place time limitations on the display of records and we plan to test this feature with a few special research-related events.

Recent Publications - The recent publication lists will be compiled by searching major scientific databases, such as Web of Science, and formatting the citations into a standard style using RefWorks. Sara Gonzalez already has experience creating and maintaining faculty publication lists for the Astronomy, Physics, and Geology departments and we plan to follow her procedure. We will work closely with the other science subject liaisons to ensure that the appropriate databases are being searched and collaborate in publicizing their department publication lists if desired.

Cornell is planning a significant upgrade to the database software in late fall that will potentially facilitate dynamic harvesting of data from external databases. Once this new version is installed, we will explore the possibility of connecting to other UF databases to bring in other types of information into VIVO. Databases we will consider include the Division of Sponsored Research's grant database, Peoplesoft, the Registrar's course system, and IFAS' UNIFAS database that contains faculty, grant, course, and publication information.

Personnel:

For this stage of the database development, the data will be inputted manually by an OPS hire. The proposed pay for the OPS hire is \$10/hour at 0.375 FTE. Valrie Davis and Sara Gonzalez will take responsibility for organizing the ontology, creating relationships, and overseeing the data quality. We will periodically review the database contents with the library liaisons who will be encouraged to demonstrate it to their departments for feedback and additional data.

Computer Resources:

Cornell University is providing the test server space for our initial implementation of their VIVO software. We plan on staying with their server setup through this phase of development since it possesses adequate space for the inputted data described above.

Travel:

We are requesting funds for Valrie Davis and Sara Gonzalez to visit Cornell for 2 days after the new VIVO software upgrade is implemented. We plan to meet with the library staff responsible for VIVO to discuss strategies for implementation and receive instruction on the new version. This visit will be important for strengthening ties with their support staff and drawing upon their 2 year experience in populating and marketing the database successfully to the Cornell community.

Table 1: List of departments that will be included in this early implementation of VIVO.

CLAS Departments	IFAS Departments
Astronomy	Agricultural Education and Communication
Botany	Agricultural and Biological Engineering
Chemistry	Agronomy
Geological Sciences	Animal Molecular and Cellular Biology
Mathematics	Animal Sciences
Physics	Entomology and Nematology
Statistics	Environmental Horticulture
Zoology	Family, Youth and Community Sciences
	Fisheries and Aquatic Sciences
	Food and Resource Economics
	Food Science and Human Nutrition
	School of Forest Resources and Conservation
	Horticultural Sciences
	Microbiology and Cell Science
	School of Natural Resources and Environment
	Plant Molecular and Cellular Biology
	Plant Pathology
	Soil and Water Science
	Wildlife Ecology and Conservation
	Plant Medicine

3. Objectives and Assessment

3a. Timeline

Month	Task	Personnel
November 2007	Locate OPS hire	Gonzalez and Davis
	Create department profiles	Gonzalez and Davis
	Create training plan and input guidelines	Gonzalez and Davis
December 2007	Begin inputting faculty profiles	OPS hire
	Explore new VIVO software	Gonzalez and Davis
	Begin developing search queries for department publication lists	Gonzalez and Davis
January 2008	Visit Cornell to meet with VIVO development staff	Gonzalez and Davis
	Continue inputting faculty profiles	OPS hire

	Continue creating publication search queries	Gonzalez and Davis
	Begin inputting publications and linking with authors	Davis
	Identify and input facilities	Gonzalez and OPS hire
February 2008	Continue inputting publications	Gonzalez, Davis, and OPS hire
	Begin exploring dynamic harvesting of information	Gonzalez and Davis
	Begin exploration of hosting VIVO locally at UF	Gonzalez and Davis
	Explore submitting an external grant (LSTA or NSF)	Gonzalez and Davis
March 2008	Continue inputting publications	OPS hire
	Continue exploring dynamic harvesting of data	Gonzalez and Davis
	Work with subject liaisons to display VIVO to departments and seek feedback	Gonzalez and Davis
	Deadline for LSTA grant	Gonzalez and Davis
April 2008	Explore expanding VIVO to the remaining CLAS departments and the College of Engineering	Gonzalez and Davis
	Present VIVO to library faculty and staff at a town meeting	Gonzalez, Davis, and OPS hire
May 2008	Explore harvesting course information from Registrar's database	Gonzalez and Davis

3b. Assessment

The effectiveness of the project will be measured using the feedback acquired at the departmental and Faculty Senate meetings, and by viewing the usage statistics of the database. The comments solicited from the meetings will assist us in needs assessment and identifying changes that could be considered with future versions, as well as inform us of further information needs within the UF community. The final product will include the 28 mentioned departments (see Table 1) and will pave the way to future developments such as the inclusion of additional departments, the dynamic harvesting of data, as well as continued financial support both internal and external to UF.

Attached letters of support: Shelley Arlen, Chuck Moss (FRED), Eric Triplett (Microbiology), Will Chaney (Systems)

4. Works Cited

Lewis, D.W. (2007). A Strategy for Academic Libraries in the First Quarter of the 21st Century. *College and Research Libraries*. 68, 5. 418-434.