I. Cover sheet

1. **Title of the project:** Developing an infrastructure for information support for clinical and translational researchers

2. **Date of Submission:** August 31, 2011

3. **Name of Library and Institution:**
   Health Science Center Library, University of Florida

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II. Summary

In this project, the University of Florida’s Health Science Center Libraries (HSCL) will undertake a number of activities to prepare it to meet the information needs of the researchers in UF’s fledgling Clinical and Translational Science Institute (CTSI). The CTSI has existed as an NIH-funded entity since 2009, and is composed of over 140 CTSI-funded researchers and over 450 affiliate researchers from across the institution’s disciplines. In order to begin to meet the information needs of these researchers and to build an information service infrastructure to support the institute, the HSCL will conduct a general information needs assessment for members of the CTSI (survey, focus group, interviews) as well as an external survey related to library-based support for clinical and translational research. It is expected that this two-pronged approach will uncover needs and services currently unanticipated by UF HSCL librarians. Furthermore, the library will concentrate on exploring and developing services in five areas of need already identified by library clients – data management services, bioinformatics instruction and support, identification and documentation of research impact, CTSA renewal support, and systematic review assistance. In order to prepare for the last three of these services, librarians will be trained by experts from Washington University, Dartmouth College, and Yale University.

III. Statement of Work

A. Introduction and Background

In 2009, the University of Florida received a Clinical and Translational Science Award (CTSA) in support of its fledgling Clinical and Translational Science Institute (CTSI; http://www.ctsi.ufl.edu/). The stated goal of the institute is to “improve human health by accelerating the translation of scientific discoveries into practical applications and practices for the diagnosis, treatment, prevention and cure of human diseases”. Thirteen of the 16 colleges at UF have faculty members affiliated with the institute, with the primary campus library serving the institute being the Health Science Center Libraries (HSCL). Although the HSCL has made a commitment to serving the CTSI by hiring an experienced clinical and research librarian to work with these researchers, the sheer size of the institute and the diverse disciplines represented require a broader approach than one dedicated librarian.

Several areas of potential library support are recognized as important for clinical and translational research, including bioinformatics, data services, and the creation of systematic reviews. While the HSCL provides basic bioinformatics support to students in the health sciences, it currently lacks a robust bioinformatics instructional service targeted to faculty and post-docs. The library has not yet developed data services of any nature, and, while assisting in the performance of a few systematic reviews each year, does not have what could be considered
a formal systematic review service. Furthermore, requirements for the CTSA renewal process provide the opportunity for libraries to develop new roles and relationships, assessing and documenting research impact and providing extensive support to the renewal process. Unfortunately, such new roles require new types of training, with expertise located at relatively few institutions.

The intent of this project is to address information needs that have already been requested by University of Florida clinical and translational researchers, as well as to identify new needs through assessment and external survey. To prepare HSCL librarians to take on these new roles, this project will include two training components – sessions on documenting research impact/assisting with the CTSA renewal process, and systematic review assistance. The HSCL is applying for funding to address the library’s current needs:

- Dedicated time to assess the information needs of the members of the CTSI and identify services provided by libraries at other institutions;
- Dedicated time to address the needs already identified in the areas of bioinformatics and data service;
- Librarian training in the areas of assessing and documenting research impact, assisting with the CTSA renewal process, and creating systematic reviews.

Information Needs Assessment and External Environmental Scan:

The HSCL has not completed an information needs assessment of any nature since 1996, when it developed a formal strategic plan. In order to more fully understand the information needs and gaps that might exist for UF’s CTSI researchers, the library must complete a thorough general information needs assessment. Such an assessment will be completed if this award is funded, and will incorporate an online survey as well as focus groups and interviews with CTSI researchers. Additionally, given the interest that CTSI members have already expressed related to bioinformatics support and data services, separate needs assessments will be completed in these areas.

To discern what services are performed by other libraries serving clinical and translational researchers, a survey will be constructed and administered to library directors and heads of reference units at medical libraries in the United States, Canada, and Great Britain. This survey will be IRB-approved, and patterned after a survey the PI (Michele Tennant) completed in February of 2010 that was sent only to libraries that serve funded CTSIs. The purpose of the former survey was to gain an understanding of the diversity and depth of library services provided to clinical and translational researchers, and concentrated on areas of interest to the HSCL. Results were presented at both the American Medical Informatics Association’s Joint
Summits on Translational Science (March 2011) and at an AAAS-sponsored program at the Medical Library Association’s annual conference (May 2011). Sixty-nine librarians responded to the survey, with 65 indicating that they do provide services to these researchers. Survey responses indicated that somewhat “traditional” library services were the most commonly offered – more than 80% provide mediated searching, teach researchers how to search, and/or assist researchers to develop search strategies. However, other services of interest to clinical and translational researchers, were far less common – over 50% of respondents provide no data services, with over 40% providing no bioinformatics support. Less than one-third of respondents assist with systematic reviews, and even fewer (14.6%) perform the complex IACUC searches required for animal research. Open ended responses suggested the need to become more involved in bioinformatics, data services, and systematic reviews, yet barriers, such as lack of staffing, funding, and trained individuals prevent libraries from providing these services. While this survey was a good starting point for understanding service needs and level of provision, the study did have some limitations. First, only libraries at those institutions in which CTSAs had been awarded were surveyed. The reason to limit to those institutions was a practical one – the need to have a well-defined cohort in which the survey participants would understand various terminologies without lengthy explanation or the likelihood of misunderstandings. However, clinical and translational research is supported by libraries in institutions without CTSA funding; furthermore, many libraries in countries other than the US provide such services and input from those libraries was lacking in the first survey. A number of new services were discussed in open ended responses in the initial survey, and can be added to the newer version. For these reasons, the survey will be repeated as part of this project, incorporating new content and allowing participation by a wider and international audience.

Bioinformatics Support:

One of the goals of translational research is to bridge the gap that has traditionally occurred between basic science and clinical researchers. The new field of “translational bioinformatics” promises to bridge that divide, by taking advantage of existing tools and developing new ones that can facilitate discovery and provide linkages from the bench to the bedside. Prominent medical libraries such as the Becker Medical Library at Washington University, the University of Pittsburgh’s Health Sciences Library, the University of Southern California’s Norris Medical Library, and Harvard’s Countway Library all provide exemplary translational bioinformatics support services and instruction to their clients, and serve as models for the rest of the profession. Although UF’s HSCL was one of the early leaders in providing bioinformatics services to its basic science clientele (Tennant and Miyamoto, J Med Libr Assoc. 2002 Apr;90(2):181-93; Tennant, Ref Servs Rev. 2005 Jan;33(1):12-9; Lyon et al., J Med Libr Assoc. 2006 Jul;94(3):330-5), staffing deficiencies and administrative changes have hindered the ability to expand those services to meet the stated needs of CTSI researchers. Although the HSCL has maintained its
high level of bioinformatics instruction to students in the clinical, PhD, and undergraduate programs, no classes or services are targeted at the faculty or post-doctoral level, and no courses or services are specifically related to translational bioinformatics. With the recent hire of two librarians with biology backgrounds (Hannah Norton and Rolando Milian), the HSCL is once again poised to become a leader in providing such support. To do so, the HSCL is requesting funding for dedicated time for these librarians and the PI to create a slate of relevant bioinformatics resource classes targeted to faculty and post-docs in the CTSI. Once developed, these courses will be taught routinely at the HSCL in its 27 seat computer classroom, but will also be presented at faculty meetings, journal clubs, and other locations by request. Although basic to intermediate training has already been requested by numerous researchers over the last year (especially in the areas of genome resources and the BLAST resource), librarians at the HSCL know little about other bioinformatics-related information needs (for example, which resources should be licensed by the library, which advanced courses should be developed, what sort of consulting services are needed). It is therefore a goal of this project to administer a needs assessment related to bioinformatics support.

Data Services:

With the development of NIH and National Science Foundation data management and sharing requirements, the library’s role in this arena has become apparent. Numerous institutions have created data management templates and nascent data services plans specific to their institutions and their needs. The first step in such an endeavor is a data services needs assessment. Again, the HSCL is poised to conduct such an assessment, as three librarians (Milian, Norton, and Tennant) have attended data-related training or conferences in the last year, and Associate Dean and Director Cecilia Botero is currently a participant in the ARL/DLF E-Science Institute. Furthermore, the HSCL has also recently developed a strong professional relationship with the Director of UF’s High Performance Computing Center (Erik Deumens), who values the library’s role in data endeavors. Following the needs assessment (survey and interviews with CTSI researchers), the HSCL will be prepared to modify data management templates and instructional materials existing at other institutions to conform to the needs of UF’s CTSI community.

Another role for the library in data management is related to U.S. Public Law 110-85 (Food and Drug Administration Amendments Act of 2007 or FDAAA), Title VIII, Section 801. This law mandates that a "responsible party" (i.e., the sponsor or designated principal investigator) register and report results of all "applicable clinical trials" in the NIH's clinical trial registry (http://www.clinicaltrials.gov). Results must be reported in ClinicalTrials.gov on a 6-month schedule during the trial period and complete results must be entered upon official closure of the trial. The FDA recently amended the statutes to require the addition of a specifically-worded statement to all informed consent documents in these trials. The effective date was
March 7, 2011, with a compliance date of March 7, 2012 for clinical trials initiated on or after the compliance date. The consequences of non-compliance include the FDA seeking administrative, civil, and criminal penalties, including fines of $10,000 or more per incident and/or loss of federal grant funding for the entire organization. Because of the seriousness of these potential costs to UF, the CTSI is working to develop methods of assisting investigators with compliance. The CTSI’s Regulatory Knowledge and Research Support (RKRS) committee (which includes the HSCL’s Clinical Research Librarian, Jennifer Lyon) has been debating possible support mechanisms throughout summer 2011 and is committed to providing education, training, and guidance for UF researchers. It is absolutely vital that the HSCL collaborate with other members of the RKRS group and bolster the efforts of the CTSI to ensure UF’s full compliance with the FDA requirements. Identifying the HSCL’s role(s) in this endeavor, and developing appropriate services, are goals of this proposal.

Researcher Impact and Assistance for CTSA Renewal Efforts:

The classic method of assessing the impact of research focuses on scholarly output, most specifically the number of publications and how often they are cited. However, such an approach is severely limited in its scope. A more comprehensive approach to evaluating the impact of research efforts would include such factors as knowledge transfer, clinical implementation and community benefit. Knowledge transfer includes the spread of the new research data throughout the research and educational community, including its incorporation into theoretical frameworks, curriculum, scholarly debate and communication, stimulation of new, related research efforts, and sharing or sale of biological or pharmaceutical materials or medical devices. Clinical implementation includes changes in medical practice, utilization of new diagnostic techniques, measurements, drugs/treatments or procedures in patient care and effects on patient care outcomes. Community benefits include changes in the healthcare and quality of life of populations, including economic and public health effects. A true assessment of the impact of research – and the efforts of the CTSI to improve and increase the efficiency of research – must consider all of these arenas.

The UF CTSI undergoes a yearly assessment of its activity and impact and will, within a couple of years, begin the extensive CTSA grant renewal process. Already, Lyon has received initial queries from the CTSI regarding research output assessment, such as identifying publications citing the CTSA grant and identifying the most highly cited clinical research publications of the last two years. Additionally, the librarian will be conducting training sessions for CTSI personnel on methods of searching for publications by UF researchers. These early inquiries highlight the need for HSCL librarians to prepare to support the CTSI as it proceeds through internal and external evaluation of its impact on the UF research community. As part of that preparation, it will be important to take advantage of the experience of previous institutions
that have undergone that renewal process. Colleagues at such institutions have highlighted the importance of assessing the effect of the CTSI and the research it enables in all of these areas, research output, knowledge transfer, clinical implementation, and community benefits. One of the best examples of a systematic approach to evaluating research impact is that developed by the Becker Medical Library for the Washington University-St. Louis Institute of Clinical and Translational Sciences (ICTS). The Becker model for assessment of research impact (J Med Libr Assoc. 2010 January; 98(1): 17–23) is one that could be studied, adapted and implemented by the HSCL to provide significant and valuable support for the CTSI, both immediately and in the future. As such, this submission proposes that five librarians from the HSCL and Borland Library in Jacksonville visit Becker Medical Library for training in assessing and documenting research impact and assisting with the CTSA renewal effort. Once these librarians return to Florida, they will be able to train the remainder of the HSCL/Borland librarians to provide these services for the University of Florida. Paul Schoening, Associate Dean and Director of Becker Medical Library, has agreed to host these librarians prior to the April 30 end date for this award (see attached email).

Systematic Reviews:

Systematic reviews and their quantitative forms, meta-analyses, are generally considered to be the highest form of clinical and research evidence. When conducted appropriately, they merge the extensive wealth of the biomedical literature into a concise, carefully evaluated summary that can be utilized to guide and redefine clinical practice and direct future research efforts. However, the process of conducting a quality systematic review is a time- and effort-consuming challenge; they are, in and of themselves, actual research projects. Individual clinical studies act as the 'subjects' of systematic reviews much as individual patients are the 'subjects' of the clinical trials. Significant issues of publication bias must be eliminated by use of a highly systematic, methodological approach that utilizes available expertise within collaborative teams. For example, just as a statistician contributes necessary knowledge and skills to the quantitative data-analysis aspects of a meta-analysis, a medical librarian contributes vital expertise in literature searching. This expertise includes knowledge of controlled vocabularies, logical construction of search strategies, identification of databases and resources, and the ability to organize large result sets effectively. Therefore the inclusion of a highly-trained librarian within the collaborative teams conducting systematic review of the literature is vital to improving quality, accuracy, and resulting impact of this unique type of research. In order to train HSCL and Borland librarians to assist in or conduct systematic reviews, we propose that experts Janis Glover (Yale University) and Karen Odato (Dartmouth College) travel to the University of Florida to teach their popular Medical Library Association-approved course "Searching in Support of Systematic Reviews" (http://cech.mlanet.org/node/489), as well as a new advanced course that they will develop. Furthermore, Glover and Odato will confer with Botero and library staff to discuss the feasibility
of developing a formal systematic review service. Glover and Odato have agreed to perform these tasks the award is funded (see attached email).

Expertise and Resources in Place:

While it is apparent from the above discussion that the HSCL has much work to do in terms of information needs assessment, service enhancement and creation, and librarian training. The library HSCL has made several commitments over the last two years to move in these directions. A Clinical Research Librarian (Lyon) has been employed as a tenure track faculty member at the HSCL in Gainesville since July of 2010. Her expertise in working in support of both the clinical and research environments while at Vanderbilt University provided her instant credibility with the fledgling CTSA. She has developed excellent working relationships with her CTSI colleagues, and serves on the CTSI’s Regulatory Knowledge and Research Support (RKRS) committee, led the effort to develop the HSCL’s support program for the NIH Public Access Policy, developed a literature search tracking system using the RedCap database, and teaches in the CTSI curriculum. The HSCL has long supported the bioinformatics needs of its basic science researchers through the efforts of this proposal’s PI (Tennant). With the hiring of two librarians with biological backgrounds (Norton and Milian) the library has the expertise and staffing to enhance its bioinformatics support program as well as develop its data services program, pending dedicated funding through this proposal. The library is poised to move into the area of systematic review assistance, as the majority of the librarians in the Biomedical and Health Information Services (reference) department are expert searchers. What is missing is training in the specifics of the systematic review, and an understanding of if/how to develop a sustainable and scalable formal service.

B. Target Population

Needs assessments and services/products created (bioinformatics workshops, data management plans, potential systematic review service) will be targeted to the clinical and translational research community at the University of Florida. UF’s CTSI was founded in 2008, and funded by the NIH in 2009. The CTSI provides over 40 services to researchers, extensive educational programs, and support for increasing UF’s community engagement efforts. Research services include regulatory assistance (IRB, RAC, etc.), a data management system, biostatics support, literature searching assistance, quality assurance services, research ethics consultations, research project consultants, a biorepository, and multiple core facilities. Clinical research units (CRUs) under the CTSI’s aegis include the UF Clinical Research Center and the Dental, Cancer Center, Cardiovascular, GI/Hepatobiliary, Ageing, Pain, Neuromedicine, Sleep Disorders, Veterans Administration, and Phase I CRUs. Education programs include KL2 programs for junior faculty, TL 1 predoctoral training, an Advanced Postgraduate Program in Clinical Investigation,
a Master of Science in Clinic and Translation Science, Study Coordinator Certification, and an MD-PhD program. Additionally, the UF CTSI has partnered with Florida State University to create a statewide medical research network and collaborates with the UF agricultural extensions (IFAS) to reach into local communities.

Librarian training in the areas of research impact documentation and CTSA renewal will be targeted to librarians at the HSCL. Five librarians in leadership positions and/or with liaison responsibilities tied to CTSI researchers will travel to the Becker Medical Library at Washington University in St. Louis for this training. Training for librarians in the systematic review process will be targeted to all librarians at the Gainesville HSCL as well as colleagues at the Borland Medical Library in Jacksonville. Finally, the external survey of library services will be targeted to librarians who work in libraries that serve clinical and translational researchers in the US, Canada, and the United Kingdom.

C. Goals and Objectives

The goals and objectives of this proposal are as follow:

1. Identify the information needs of the clinical and translational researchers at the University of Florida
   - Develop and implement an information needs assessment for UF’s CTSI (Lyon, Tennant, Botero)
2. Identify the services provided to clinical and translational researchers at other institutions
   - Perform survey of services provided at CTSA-funded and other libraries that support clinical and translational research (based on survey performed in February of 2011) (Tennant)
3. Develop librarian expertise in the areas of assessing and documenting research impact and assisting with the CTSA renewal process
   - Send five librarians (Botero, Gretchen Kuntz, Lyon, Nancy Schaefer, Tennant) to the Bernard Becker Medical Library at Washington University in St. Louis for extensive training by Holmes and Sarli
4. Enhance the HSCL’s efforts in bioinformatics support (Milian, Norton, Tennant)
   - Create series of bioinformatics instructional sessions (basic through intermediate courses as requested by clients)
   - Undertake needs assessment regarding advanced bioinformatics support and resource needs
5. Establish the HSCL’s data services program (Milian, Botero, Norton, Tennant)
   - Undertake data management needs assessment
• Develop data management plan template and instructional materials customized to UF clinical and translational researcher needs
• Develop plan to support the UF CTSI regarding the Clinical Trials.gov requirement (data team plus Lyon)

6. Educate HSCL librarians in the systematic review process
• Host at the HSCL systematic review experts Glover and Odato to train the Biomedical and Health Information Services (reference) librarians and those from Borland Library in Jacksonville in the development of systematic reviews
• Host these consultants to begin conversation on the feasibility of developing a formal systematic review service

D. Methodology

Building the HSCL’s CTSI information infrastructure based on the needs of these researchers will require a multi-pronged approach, including needs assessment, training for the HSCL and Borland librarians, and service planning, creation, implementation, and evaluation. Three separate internal needs assessments are planned. The first will be a general information needs assessment survey to CTSI researchers, to discern the broad information needs of these researchers. Needs assessment will be followed by a series of focus groups and interviews with key researchers (junior and senior), to provide detail and clarify responses. This general needs assessment will cover traditional services such as literature searching, information resources instruction, resources, and expert searching, as well as those services and issues more recently associated with libraries, such as assistance with collaboration and scholarly communication issues. The assessment will also provide ample opportunity for researchers to tell us about their information needs that may not be as readily apparent. Development of the assessment tool, submission to IRB and assessment planning will begin in November 2011, with the expectation that the survey will be sent to researchers in January 2012 and the focus groups/interviews would occur in February. Data will be analyzed in March, with a final report and recommendations due in April. The needs assessment survey and focus groups/interviews will be conducted by Lyon and Tennant.

This formal needs assessment will be augmented by an external survey to discern what services are provided by libraries to support their clinical and translational research communities. As described in the “Introduction and Background” section of this proposal, a similar survey was conducted by in February 2011, but limited to medical libraries at institutions that were funded by CTSAs. Unsurprisingly, services that are considered traditional, such as literature searching and user training were reported by most libraries. Data services, bioinformatics support, and assistance in the systematic review process were provided by fewer libraries, but were included
on many libraries’ wish lists for the future. Reported barriers included the lack of a dedicated person to work with clinical and translational researchers (due to funding) and a lack of trained librarians or other information professionals to meet these growing needs. The proposed revised survey would overcome the limitation of confining this external environmental scan to CTSA-funded institutions, and would include a broader assortment of potential services. Tennant will modify the original survey and seek IRB approval in October 2011, with the survey going live in November and data analyzed in December.

Although needs assessment is central to this project, the HSCL is already keenly aware of service gaps related to clinical and translational research support. Bioinformatics resources, especially those created for translational bioinformatics, are essential tools for translating the results of bench science into interventions at the bedside. Library-based support for bioinformatics is likewise an essential role at CTSA-funded institutions. While the HSCL currently provides course-integrated instruction in bioinformatics resources to graduate students in the College of Medicine and in the multidisciplinary Genetics and Genomics PhD program, as well as undergraduate courses in general genetics and biophysical chemistry, the library does not currently provide a slate of stand-alone courses targeted to post doctoral associates and research faculty. Based on patron requests, courses such as “Introduction to NCBI Resources,” “Entrez Gene,” “BLAST,” “Genomics Resources” and “Genetics Resources for Clinical Researchers” will be created, one class per month, from November 2011 through March 2012. A course evaluation tool will be designed in March, and classes will be advertised, taught and evaluated in April. While the need for such courses is known based on client requests, the HSCL has never performed a needs assessment tied specifically to bioinformatics support. A bioinformatics-specific needs assessment will be developed to answer questions such as which resources should be licensed by the library, which advanced courses should be developed, and what level of bioinformatics consultation services are required by clinical and translational science researchers. The assessment will be developed and sent to IRB in January 2012, and conducted in February, with data analyzed and recommendations made in March. The bioinformatics team includes Norton and Tennant and will be led by Milian.

With NIH and NSF data requirements already in existence and new requirements regarding data and ClinicalTrials.gov imminent, data management is an area rife with possibilities for libraries, and of consequence for clinical and translational researchers. As the HSCL has to this point not assessed the data management needs of its clients, the initial step in creating a data support program will be a needs assessment carried out by the data team of Norton (lead), Botero, Milian and Tennant. The assessment will be created and sent to IRB in October 2011, with survey and interviews conducted in November and data analyzed in December. Utilizing information gleaned from the assessments, data management plans and instructional and other data resources obtained from other institutions will be customized for the
HSCL’s CTSI client base. Throughout the early months of the granting period, Lyon will continue to work with the CTSI’s RKRS to investigate the issues surrounding support for compliance with the ClinicalTrials.gov regulations described in the “Introduction and Background” section of this proposal. In March of 2012, Lyon in conjunction with the HSCL’s data team will develop the HSCL’s plan to facilitate researcher compliance.

The final component of the award relates to librarian training in the areas of assessing and documenting research impact, library assistance in the CTSA renewal process, and in the performance of systematic reviews – three areas in which the HSCL librarians currently lack experience. Experts in the first two areas, Dr. Kristi Holmes and Cathy Sarli (Bernard Becker Medical Library at Washington University in St. Louis) are co-authors of a research impact model (Beyond citation analysis: a model for assessment of research impact, J Med Libr Assoc. 2010 January; 98(1): 17–23), and provided extensive information services assistance for Washington University’s CTSA renewal effort. Five librarians (Botero, Kuntz, Lyon, Schaefer, Tennant) from the HSCL will travel to St. Louis to be trained in these areas. The librarians will spend three days at Becker Library for training, and Botero will also meet with Director and Associate Dean Paul Schoening to discuss strategies for embedding the HSCL’s librarians and services more fully into UF’s CTSI. It was determined that sending librarians to St. Louis for training would be more effective than bringing Holmes and Sarli to Gainesville, as this arrangement allows access to the tools and resources used in their work, as well as access to individuals in the St. Louis ICTS. Schoening has agreed to host the HSCL team of five for the three days (see attached email). Although dates for the trip have not yet been confirmed, it is likely to take place in winter/spring 2012. Tennant will coordinate the visit and training.

Systematic review training will also be performed in February of 2012. The goal is to train all 10 practicing librarians in the Gainesville HSCL, as well as the three librarians at Borland Library in Jacksonville. Training will be held in the HSCL’s Gainesville computer training classroom, equipped with 27 computers. Expert trainers Janis Glover (Yale University) and Karen Odato (Dartmouth College) have agreed to teach their Medical Library Association approved class "Searching in Support of Systematic Reviews" as well as an advanced course that they will develop (see attached email from Glover). While in Gainesville, Glover and Odato will consult with Botero and HSCL librarians regarding the feasibility of creating a full service systematic review program. The Glover/Odato visit is tentatively scheduled for two working days in February, with a travel day on either side, and will be coordinated by Tennant.

E. Promotion Plan

The HSCL has developed a detailed communications and marketing plan for all projects, services and events hosted by the libraries. Strategies include announcements over email,
postings on the HSCL’s website, Facebook, and Twitter accounts, printed posters and signage, and newsletters and other print media. Additionally, the HSCL has a robust liaison librarian program, in which each department or program in the academic health center has a librarian assigned. These liaisons have close ties to their academic units and have insights into the best ways to communicate with their users (many of whom are members of the CTSI). All of these means will be tapped to advertise the new services created (bioinformatics classes, data management plans, assistance with systematic reviews and assessing research impact), as well as for the three needs assessments proposed (general CTSI information needs, bioinformatics support needs, data services’ needs). Furthermore, the HSCL’s Clinical Research Librarian (Lyon) works closely with the CTSI in many capacities, and has the opportunity to promote all library activities related to the CTSI through her connections and responsibilities with the CTSI.

Given the short amount of time between the proposed start date and the end of the funding period, it is expected that services for bioinformatics and data management will be developed and implemented very close to the April 30 end date, with actual systematic review and research impact assessment services beginning after the grant end date. As such, timing of promotional activities will be tied to the development of the services and for some services will occur after the grant ends.

F. Evaluation Plan

Needs Assessment and External Environmental Scan:

Output/process objectives to be met for the needs assessment include the creation and implementation of the general information needs assessment survey, focus groups, and interviews. These assessments will be considered successful if:

- They are completed by the deadlines listed in the timeline
- The survey receives a response rate of over 10%
- At least 10 CTSI researchers attend focus groups and at least 10 are interviewed
- That at least three actionable needs are identified from the assessments

Output/process objectives to be met for the external environmental scan (survey of other libraries) include:

- Survey modification, dissemination, and data analysis by the deadlines listed in the timeline
- Responses received by at least 100 librarians, including some from non-CTSI funded institutions and some from Canada and the U.K.
Bioinformatics Component:

The bioinformatics component has both output/process and outcome measures, and objectives will be considered successful if:

- Five classes are created, advertised and taught by the April 30 award end date
- At least five researchers attend each class
- Evaluative feedback from librarian instructors and over 80% of participants is positive
- The bioinformatics needs assessment is created, disseminated, and data analyzed by deadline in timeline
- At least five researchers are interviewed
- At least three actionable needs are identified by the assessments

Data Services Component:

The data services component has both output/process and outcome measures, and objectives will be considered successful if:

- The data management needs assessment is created, disseminated, and data analyzed by deadline in timeline
- At least 10 researchers are interviewed
- At least three actionable needs are identified by the assessments
- The assessments provide enough information to customize for UF researchers data management templates, educational materials and other resources available from other institutions, and that those deliverables are completed
- A robust plan for library involvement in the ClinicalTrials.gov requirement is completed and evaluated as useful by the CTSI’s RKRS (Regulatory Knowledge and Research Support) committee members

Librarian Training Component:

The librarian training component (assessing and documenting research impact, how to assist with CTSA renewals, systematic reviews) will be considered successful if:

- All five librarians targeted (Botero, Kuntz, Lyon, Schaefer, Tennant) attend in-depth training at Washington University to learn how to assess and document research impact and assist in the CTSA renewal process
• Learning occurs at these sessions at Washington University, based on pre- and post-test scores as well as learner confidence level as measured through a post-class survey
• Upon return to the University of Florida, learners schedule a time to train the rest of the librarians in these areas (post award end date)
• At least 80% of HSCL and Borland librarians attend the systematic reviews training provided in Gainesville by Glover and Odato
• Learning occurs at these sessions in Gainesville, based on pre- and post-test scores as well as learner confidence level as measured through a post-class survey
• A decision is made on the feasibility of developing a full-service systematic reviews service (as opposed to merely assisting with the creation of systematic reviews)
• An increase in requests for systematic review assistance is observed (post award end date)

G. Continuation Plan

Over the last two years the HSCL has made a commitment to expand services to clinical and translational researchers by hiring a dedicated Clinical Research Librarian (Lyon), as well as two librarians with biology backgrounds (Liaison and Reference Librarian Norton, Basic Biomedical Sciences Librarian Milian). The library has also committed to training its staff for these new roles necessitated by clinical and translational research. For example, in 2011 the library funded Lyon’s attendance at the sixth Evidence-Based Library and Information Practice conference in Manchester, UK. Bioinformatics training for HSCL librarians has included the “Entry to the Genome World: Genome Browsers” offered at the MLA annual conference in 2011 (Milian) and a recent two day NCBI Discovery Workshop (Milian, Norton, Tennant). Training and informational sessions related to data services included attendance at the 2010 IATUL conference on data curation (Botero, Tennant), “The Medical Librarians’ Role in e-Science and Data Sharing” at MLA 2011 (Norton, Tennant), the University of Illinois Data Curation Summer Institute (Tennant), and the E-science Bootcamp held at the University of Virginia this spring (Milian). Botero is currently enrolled in the ARL/DFL E-Science Institute. Librarians at the HSCL also benefitted from Kristi Holmes’ introduction to library support for translational science presented during her NNLM-funded visit to Gainesville in March of 2011. Clearly through these hires and library funded/hosted staff training initiatives, the HSCL has demonstrated its commitment to developing an information infrastructure and serving the clinical and translational science mission of the University of Florida.

Currently, the two hurdles preventing the HSCL from moving forward are: 1. Lack of dedicated staff time to complete complex tasks such as needs assessments and service planning
and development; and 2. Lack of in-depth training related to assessing and documenting research impact, assisting with CTSA renewals, and assisting with/conducting systematic reviews. Personnel funding from the NN/LM as requested would allow Botero, Lyon, Milian, Norton and Tennant to temporarily step away from some assigned duties to perform the requisite needs assessments and plan services around those results. Additionally, it would provide the time to carefully plan and create true deliverables such as a slate of bioinformatics courses and resources around data management, rather than trying to complete these activities on an ad hoc, just in time fashion. Once the needs assessments are completed and the data and bioinformatics services proposed above are in place, the HSCL commits to continued service in these areas by Lyon, Milian, Norton and Tennant. The library will carefully assess which current services might be scaled back or eliminated entirely to make room for these services.

Because bioinformatics support and data management are strategic priorities for the HSCL, the library has committed to providing funding for bioinformatics and data management training for its librarians as described above. However, in these difficult economic times the HSCL’s training funds have now dwindled significantly. As such, it is essential for the library to acquire outside funding for training related to assessing and documenting researcher impact, assisting with CTSA renewal efforts, and the systematic review process. Following this training, the HSCL is committed to assisting the CTSI with researcher impact and renewal utilizing existing library staff. The CTSI is such an integral part of the academic health center landscape that there really is no choice in the matter. The HSCL will investigate the possibility of future CTSI-funded library support, but even without that option, the library is committed to serving in this capacity. Similarly, systematic review assistance is becoming a mainstay at many medical libraries, and the current HSCL liaisons are frequently requested for assistance. The HSCL is committed to training all liaisons to assist in the process through expert searching and critical appraisal. Discussion with Glover and Odato will help library administration determine whether it is feasible for the HSCL to develop a full-service systematic review service, and how the HSCL might support such an endeavor.

H. Qualifications

See attachments for CVs of University of Florida investigators.

PI - Michele R. Tennant, PhD, MLIS, AHIP, Assistant Director, Biomedical and Health Information Services, Health Science Center Libraries and Bioinformatics Librarian, UF Genetics Institute, University of Florida, Gainesville, FL 32610-0206, 352-273-8426, 352-846-2271(fax), tennantm@ufl.edu

Tennant has extensive experience in conducting and supervising research projects in all aspects of biomedical librarianship. Her background as a molecular researcher provides a clear
understanding of the information needs and culture of research scientists. She has provided instruction in the use of bioinformatics resources for biomedical researchers and librarians, and has received training related to data management. She has extensive experience in conducting patron surveys, assessments, and focus groups. She will coordinate all aspects of the project, and serve on the bioinformatics and data management assessment and support teams. She will also perform the external survey related to library-based support for clinical and translational research. She will travel to Washington University for research impact and CTSA renewal support training, and will take part in the training efforts related to systematic review provision.

Co-PI - Jennifer Lyon, MS, MLIS, AHIP, Clinical Research Librarian, Health Science Center Libraries, University of Florida, Gainesville, FL 32610-0206, 352-273-8441, 352-846-2271(fax), jalyon@ufl.edu

Lyon has extensive experience meeting the information needs of clinical and translational researchers. She is the HSCL liaison to the Clinical and Translational Science Institute, serves on the CTSI’s Regulatory Knowledge and Research Support (RKRS) committee, and teaches within the CTSI curriculum. On this project she will lead the general information needs assessment for the CTSI and will serve on the team planning for clinical trials data requirement support. She will travel to Washington University for research impact and CTSA renewal support training, and will take part in the training efforts related to systematic review provision.

Co-PI – Hannah F. Norton, MLIS, AHIP, Reference Librarian and Liaison, Health Science Center Libraries, University of Florida, PO Box 100206 Gainesville, FL 32610-0206, 352-273-8412, 352-392-2565(fax), nortonh@ufl.edu

Norton has received training in data management and basic bioinformatics support. She has a bachelor’s degree in biology and works with the research community in both the College of Medicine and the College of Veterinary Medicine. She has experience in creating patron surveys, assessments, and running focus groups. She will serve on the bioinformatics and data management (lead) assessment and support teams, and will take part in the training efforts and discussion surrounding systematic review provision.

Co-PI – Rolando Milian, MLIS, Basic Biomedical Sciences Librarian, Health Science Center Libraries, University of Florida, PO Box 100206 Gainesville, FL 32610-0206, 352-273-8440,352-392-2565(fax), Rolando.milian@ufl.edu

Milian has received training in data management and bioinformatics support. He has a bachelor’s degree in biology and works with the basic science research departments in the College of Medicine. He has experience as a practicing geneticist and a clear understanding of the information needs and culture of research science. He will serve on the bioinformatics (lead)
and data management assessment and support teams, and will take part in the training efforts and discussion surrounding systematic review provision.

Co-PI - Cecilia Botero, MLIS, Associate Dean of the George A. Smathers Libraries and Director of the Health Science Center Libraries, University of Florida, PO Box 100206 Gainesville, FL 32610-0206, 352-273-8400, 352-392-2565(fax), cebote@ufl.edu

Botero will provide guidance and support for the project. She will be a member of the data team, assisting with needs assessment and interviews. She will also travel to Washington University for research impact and CTSA renewal support training, and will take part in the training efforts and discussion surrounding systematic review provision.

Trainee – Nancy Schaefer, MLIS, Reference and Liaison Librarian, Health Science Center Libraries, University of Florida, PO Box 100206 Gainesville, FL 32610-0206, 352-273-8417, 352-392-2565(fax), nancys@ufl.edu

Schaefer is the liaison librarian to a number of departments and programs, including Public Health, Community Health and Family Medicine, and Health Outcomes and Policy, units that are well represented in the CTSI. In this grant, she will attend research impact and CTSA renewal assistance training at Washington University in St. Louis.

Trainee – Gretchen Kuntz, MLIS, Clinical Librarian, Borland Library, University of Florida, 653-1 West 8th St, LRC, 2nd Floor, Jacksonville, FL, 32209, 904-244-3240, 904-244-3191(fax), gkuntz@ufl.edu

Kuntz is the Clinical Librarian at Borland Library in Jacksonville. In this grant, she will attend research impact and CTSA renewal assistance training at Washington University in St. Louis.

Trainer – Kristi L. Holmes, PhD, Bioinformaticist, Bernard Becker Medical Library, Washington University School of Medicine, 660 S. Euclid, Campus Box 8132, St. Louis, MO 63110, 314-362-4737, 314-454-6606 (fax), holmeskr@wusm.wustl.edu

Holmes is co-creator of Becker Library’s research impact model (Beyond citation analysis: a model for assessment of research impact, J Med Libr Assoc. 2010 January; 98(1): 17–23), and provided extensive information services assistance for Washington University’s CTSA renewal effort. She will provide instruction in these areas for UF HSCL librarians.
Trainer – Cathy Sarli, MLS, AHIP, Scholarly Communications Specialist, Bernard Becker Medical Library, Washington University School of Medicine, 660 South Euclid, Campus Box 8132, St. Louis, MO 63110, 314-362-7080, 314-454-6606 (fax), sarlic@wustl.edu

Sarli is co-creator of Becker Library’s research impact model (Beyond citation analysis: a model for assessment of research impact, J Med Libr Assoc. 2010 January; 98(1): 17–23), and provided extensive information services assistance for Washington University’s CTSA renewal effort. She will provide instruction in these areas for UF HSCL librarians.

Trainer – Janis Glover, MLS, AHIP, Education Services Librarian, Cushing/Whitney Medical Library, Yale University, P.O. Box 208014 New Haven, CT 06520-8014, 203-737-2962, jan.glover@yale.edu

Glover is co-developer and co-instructor of the Medical Library Association approved course "Searching in Support of Systematic Reviews" and an acclaimed expert in the field. If funded, Glover will travel to the UF HSCL in Gainesville to teach this course as well as a more advanced course (to be developed) to medical librarians from the HSCL and Borland Library. She will also consult with Botero regarding the feasibility of developing a formal systematic review service.

Trainer – Karen Odato, MLS, AHIP, Education Coordinator and Information and Education Services Librarian, Dana Biomedical Library, Dartmouth College, Hanover, NH, USA 03755, 603-650-8562, Karen.V.Odato@Dartmouth.EDU

Odato is co-developer and co-instructor of the Medical Library Association approved course "Searching in Support of Systematic Reviews" and an acclaimed expert in the field. If funded, Odato will travel to the UF HSCL in Gainesville to teach this course as well as a more advanced course (to be developed) to medical librarians from the HSCL and Borland Library. She will also consult with Botero regarding the feasibility of developing a formal systematic review service.

The University of Florida:

The University of Florida is a large, land grant, public educational research institution with a faculty of approximately 4,000 and a student body of approximately 50,000. UF is Florida's largest university, the nation's fourth-largest, and traces its beginnings to a small seminary in 1853. Since 1985, UF has been a member of the Association of American Universities, the prestigious higher-education organization comprised of the top 62 public and private institutions in North America. UF is home to 16 colleges and more than 150 research centers and institutes.
The University offers the Ph.D. in more than 90 fields and the Master's degree in more than 120 fields.

Health Science Center Libraries (Gainesville and Borland Library):

The HSC Libraries provide services and programs to support the Colleges of Medicine, Nursing, Dentistry, Pharmacy, Public Health and Health Professions, and Veterinary Medicine; the McKnight Brain Institute; the University of Florida Genetics Institute; the Emerging Pathogens Institute; the Institute for Child and Health Policy; and the Institute of Aging; Shands HealthCare; the University of Florida/Shands Cancer Center; and the University of Florida Physicians Clinics (12 primary and 21 specialty care). The HSC Libraries also support 52% ($291,000,000) of all campus research awards by providing up-to-date research content and information access and management support. Since 1999, the HSC Libraries have operated a Liaison Librarian program to facilitate partnerships with academic faculty and programs by assigning each HSC college or department a dedicated librarian who works closely with its faculty, staff and students. The HSCL currently employs 11 professional librarians and 20 staff. Borland Health Sciences Library, located on the Jacksonville campus, is a branch of the Health Sciences Center Libraries. It provides services and programs to support the Colleges of Medicine, Nursing, Pharmacy and Dentistry. In addition, Borland provides services to member institutions, including Shands Jacksonville Medical Center, Memorial Hospital and the University of St. Augustine. Borland currently employs 3 professional librarians and 3 staff.

IV. Schedule:

October 2011:

- Develop data management needs assessment and submit to IRB (Norton, Botero, Milian, Tennant)
- Plan series of bioinformatics resource courses (Milian, Norton, Tennant)
- Modify external library survey and submit to IRB (Tennant)

November 2011:

- Conduct data management needs assessment and interviews (Norton, Botero, Milian, Tennant)
- Develop and test bioinformatics course #1 (Milian, Norton, Tennant)
- Develop CTSI needs assessment and plan for interviews/focus groups; compete IRB (Lyon, Tennant)
- Conduct external library survey (Tennant)
December 2011:

- Develop and test bioinformatics course #2 (Milian, Norton, Tennant)
- Analyze data management needs assessment and interviews (Norton, Botero, Milian, Tennant)
- Analyze data and write report from external library survey (Tennant)

January 2012:

- Conduct general CTSI needs assessment survey (Lyon, Tennant)
- Develop and test bioinformatics course #3 (Milian, Norton, Tennant)
- Develop bioinformatics needs assessment and submit to IRB (Milian, Norton, Tennant)
- Modify existing (from other libraries) data management templates, plans and instructional materials, based on results of needs assessment (Norton, Botero, Milian, Tennant)

February 2012:

- Conduct general CTSI needs assessment interviews and focus groups (Lyon, Tennant)
- Conduct bioinformatics needs assessment and focus groups (Milian, Norton)
- Develop and test bioinformatics course #4 (Milian, Norton, Tennant)
- Glover and Odato training visit (systematic reviews) to the University of Florida (pending date confirmation)

March 2012:

- Analyze data from general CTSI information needs assessment (Lyon, Tennant)
- Analyze data from bioinformatics needs assessment (Milian, Norton, Tennant)
- Develop plan for library role regarding ClinicalTrials.gov requirement (Lyon, Milian, Norton, Tennant)
- Develop evaluation instrument for bioinformatics courses (Milian, Norton, Tennant)
- Five HSCL librarians (Botero, Kuntz, Lyon, Schaefer, Tennant) attend training at Washington University (pending date confirmation)

April 2012:

- General CTSI information needs assessment recommendations due (Lyon, Tennant)
- Advertise and teach slate of bioinformatics courses; participants and librarians evaluate (Milian, Norton, Tennant)
V. Other Funding

No additional funding from NLM or the NN/LM SE/A is being sought for this project. In 2010-11 Tennant received a $1000 training grant to bring Holmes to Gainesville to provide bioinformatics training and introduce the HSCL and Borland Librarians to the concepts of library support for translational research and research impact.

The HSCL has applied for the following unrelated awards in the 2011-2012 funding cycle:

Express Outreach Project Award - Linda Butson and Jennifer Lyon

Information Technology and Policy Awareness Award – Cliff Richmond

Express Mobile Technology Project Award – Michele Tennant

Express Library Digitization and Conservation Award – Nina Stoyan-Rosenzweig

Express Library Technology Improvement Awards – Verne Burch

VI. Attachments

- Curriculum vitae of UF investigators
- Letter of support from David R. Nelson, Director of the UF Clinical and Translational Science Institute
- Emails of agreement from Paul Schoening, Associate Dean and Director Becker Medical Library, Washington University and Janis Glover/Karen Odato, systematic review trainers

VII. Budget Justification

Personnel:

Milian salary/benefits – ($2,467) 160 hours total – Milian will serve as the lead for the bioinformatics service team and will serve as a member of the data management assessment and support team.

Norton salary/benefits – ($2,590) 160 hours total - Norton will serve as the lead for the data management assessment and support team and will serve as a member of the bioinformatics service team.
Lyon salary/benefits – ($2,687) 120 hours total - Lyon will lead the general information needs assessment for the CTSI and will serve on the team planning for clinical trials data requirement support.

Tennant salary – ($1,833) 60 hours total - Tennant will coordinate all aspects of the project, and serve on the bioinformatics and data management assessment and support teams. She will also work with Lyon on the general CTSI needs assessment and perform the external survey related to library-based support for clinical and translational research.

Botero salary – ($989) 20 hours total - Botero is the director of the Health Science Center Libraries and will provide guidance and support for the project, and assist the data management assessment team.

Travel for Training Expenses:

Travel to Bernard Becker Memorial Library, Washington University in St. Louis for five librarians:

Airfare, round-trip: from Jacksonville, FL to St. Louis, MO, $450 each for 5 HSCL librarians, totals $2250

Hotel, 3 rooms, 4 nights each, $150/night, totals $1800

Per diem, $36/day, 5 people, 5 days, totals $900

Rental car to and from Jacksonville from Gainesville, $45.00 each way, $90

Justification – Botero, Kuntz, Lyon, Schaefer and Tennant will travel to Washington University for research impact and CTSA renewal support training. It was determined that it would be more effective to send librarians to Washington University rather than bring the trainers to the University of Florida, as this will provide access to WU resources during training, as well as access to individuals in the ICTS. These five individuals will be able to train HSCL librarians once they return back to Florida.

Travel to the University of Florida in Gainesville for two Systematic Review trainers

Airfare, round-trip: from Lebanon, NH to Gainesville, FL for Karen Odato, $751

Airfare, round-trip: from Hanover, CT to Gainesville, FL for Janis Glover, $532

Airport parking - $100
Hotel accommodations - 2 rooms 3 nights at $130/night, $780

Per diem, $36/day, 2 people, 4 days, $288

**Other Expenses:**

Cost for Medical Library Association approval for new course, $125

Justification - Glover and Odato will travel to the UF HSCL in Gainesville to teach their MLA approved course as well as a more advanced course (to be developed) to medical librarians from the HSCL and Borland Library. They also will consult with Botero regarding the feasibility of developing a robust systematic review service.

**Total Direct Expenses:** $18,182

**Indirect Costs:** $1,818 * capped at 10% for this grant

Please provide a copy of the federally approved indirect cost rate agreement.

**Total Proposal Request:** $20,000
Professional Experience

Nov. 2009- current

**Associate Dean, George A. Smathers Libraries**  
**Director, Health Science Center Libraries**  
University of Florida

The Director is responsible for all aspects of the management of the Health Science Center Libraries. This includes the supervision of 47 FTE between the Gainesville and Jacksonville campuses. The Director plans, develops, and implements programs and services to meet the mission of the UFHSC Libraries. Provides leadership in supporting the academic, research, and clinical enterprises of the University of Florida Health Science Center (UFHSC). Advocates for the UFHSC Libraries within the Health Science Center, the University of Florida, state, region and nation, and works with the University Libraries and Lawton Chiles Legal Information Center to enhance University of Florida holdings and services.

Jan. 2006 - current

**Assistant Director for Content Management**  
University of Florida, Health Science Center Library  
Content Management Department.

Develops and implements policies and procedures of the Content Management Division. Manages the daily activities of the Division and responsible for the allocation, spending and general management of the library’s approximate 2M material budget, ensuring the library gets the greatest benefit possible with the resources available. Serves as the highest level cataloging resource for HSCL and branches while responsible for bibliographic control of all materials in the Library including electronic resources. Reviews and negotiates licensing agreements for electronic serials making necessary changes as appropriate. Serves on appropriate library, campus, state and national cataloging and technical services committees as appropriate. Participates in library-wide planning and policy development as a member of the HSCL’s senior management team.

Sept. 1999 to Dec. 2006 **Assistant Director for Resource Management**  
University of Florida, Health Science Center Library  
Resource Management Department.

Manages the day-to-day activities of the Resource Management Department and coordinates the Health Science Center Library CONSER and NACO participation with the Library of Congress; coordinates and trouble shoots the library’s implementation and use of the new Library Management System. Train staff in acquisition activities and in cataloging materials in all formats using NACO name authority standards; instructs staff in cataloging electronic resources. Procures access to electronic journals and negotiate the license agreements. Member of the Library’s senior management group.

Oct. 1995 to Sept. 1999 **Head, Serials Unit**  
University of Florida, George A. Smathers Libraries  
Serials Unit of the Resource Services Department.
Supervised and managed the day-to-day activities of the Serials Unit. Duties consisted of receiving, paying, ordering, claiming, cataloging, binding and resolving serials problems in all formats; served as coordinator for all serial electronic materials accessed by the University, including ordering, facilitating signing of licensing agreements, and cataloging; reviewed Serials policy and procedures on the Serials Operational and Policy Committee; coordinated University of Florida’s CONSER and NACO participation with the Library of Congress; and represented the library at CONSER operational meetings.

Nov. 1989 to Oct. 1995 **Head, Serials Cataloging Unit**
University of Florida, George A. Smathers Libraries
Serials Unit of the Cataloging Department.

Managed the day-to-day activities of the Serials Cataloging Unit. Coordinated the University of Florida’s CONSER and NACO participation with the Library of Congress; trained Cataloging staff in serial cataloging issues and NACO name authority standards; represented library at CONSER operational meetings; initiated and reviewed library wide serial procedures on the Serial Policy and Operational Committees; cataloged original titles and upgraded shared bibliographic records of serials titles following CONSER and NACO guidelines.

Sep. 1990 to Sep. 1992 **Contract cataloging for the National Library of Medicine**
The National Library of Medicine (Bethesda, MD)
(*Contracted with the National Library of Medicine to do original cataloging of Spanish and Portuguese serials*)

Sep. 1986 to Nov. 1989 **Latin American Serials Cataloger**
University of Florida, University Libraries
Serials Unit of the Cataloging Department.

Cataloged original titles and upgraded shared bibliographic records of serials titles following CONSER standards and NACO guidelines. Cataloged original monographic titles for the Latin American collection following NACO guidelines. Supervised student assistants. Coordinated University of Florida’s participation in the NACO program. Trained all Cataloging Department personnel in name authority work and reviewed contributions to NACO.

**Education**

May 1986 Masters’ of Library and Information Science.
The University of Texas at Austin
Graduate School of Library and Information Science

1976-1978 Bachelor of Arts, *cum laude*
University of Miami, Florida.
Major areas of study: Latin American Studies
– *with a concentration in History and Literature*

**Selected Professional Development**

Nov. 10, 2010  MLA’s ABC’s of E-Books, Gainesville, Fla. (3 CEU)
Mar. 24, 2010  Now’s the Time: Understanding the Electronic Health Record Maze and Health Sciences Librarian’s Roles, Gainesville, Fla. (4 CEU)
Apr. 7-9, 2010  CONSBLs retreat, Mobile, Ala.
March 26-27, 2009  Collection Development/Resource Sharing Conference
March 25, 2009  As a member of a four person team, developed and presented content, then facilitated discussion for the “E-Books Summit Preconference,” held as part of the “Collection Development / Resource Sharing Conference,”
June 11-12, 2008  Thieme publishers advisory board annual meeting
May 9, 2008  MLA Tools of Engagement: Attracting and Engaging Library Users: College of DuPage program
Mar. 5, 2008  MLA Web Cast: The Web 2.0 Principles and Best Practices: Discovering the Participatory Web (3.5 CEU)
Mar. 2007  MLA Survival of the Fittest: Strategies to Prove Your Library’s Value
Sept. 22, 2004  MLA the Art and Practice of Electronic Journal, Book, and Database Licenses
May 26, 2004  MLA Getting started with LinkOUT
Dec. 12, 2003  SOLINET Electronic Serials Cataloging
Feb. 21-22, 2002  ALCTS AACR2 2002 and Metadata Regional Institute
Feb. 20, 2002  OCLC’s Focus Series: Resource Sharing Forum
Feb. 21, 2002  SOLINET Creative Alternatives in ILL
March 4-8, 2002  Project Management Training
June 13, 2002  ALA Pre-Conference on electronic resource management
June 21, 2001  Copyright Law Workshop given by Laura Gasaway
Aug. 2000  ARL Licensing Workshop
Nov. 2000  ARL Advanced Licensing Workshop
May 1988  One week training in name authority work from the Library of Congress in compliance with the University of Florida’s participation in the NACO program
Nov. 1998  Attended BIBCO workshop
1997-1998  NEH Panelist, reviewed USNP grants for 1998 and 1999 funding years
1996-1998  Managed indexing of newspapers included in the Newspaper Scanning Project funded by the Mellon Foundation
1994-1999  Managed cataloging portion of the USNP grant funded by NEH
June 1995  Attended Series Authority Workshop at the Library of Congress
Nov. 1993  Participated in CONSER subject workshop at the Library of Congress
Mar. 1990  Received NACO Linked Systems Project training at the Library of Congress

Awarded Grants

June 2010-April 2011 -Principal Investigator: “Planning for Florida’s Health: A Statewide Process for Re-inventing academic Health Sciences Library Collaboration, ”NN/LM SE/A Express Planning and Assessment Award.

Funded in whole or in part with Federal funds from the National Library of Medicine, National Institutes of Health, and Department of Health and Human Services $6,000.


This UF partnership with Cornell University Library and six academic medical research institutions, to create an integrated national information network for biomedical researchers that will serve not just researchers, but also students, administrative and service officials, prospective faculty and students, donors and funding agencies, and the public. 25% FTE with two roles:, National OntologyTeam Member, and UF Ontology Team Member. $12,200,000 funded.

Professional Societies

American Library Association – Member
ALA ALCTS-CCS/SS – Member
Medical Library Association – Member
MLA Collection Development Section- Member
MLA Technical Services Section – Member
MLA AHIP– Distinguished Member

National Selected Activities
2011- MLA Collection Development Section- Chair elect
2009-2010 MLA Veterinary Medical Libraries Section Member
2008-2009 MLA Technical Services Section Nominating Committee Chair
2007-2008 MLA Technical Services Section Bylaws Committee Chair
2006-2007 MLA Technical Services Section Chair
2006-2007 MLA Scholarly Publishing Symposium Planning Committee
2005-2006 MLA Technical Services Section Program Chair 2005
2004-2005 MLA Technical Services Section Standards Committee-Member
2003-2004 MLA Technical Services Section Membership Committee-Member
2002-2003 ALCTS/AS Statistics and Research Committee-Member
2001-2002 MLA Technical Services Section Programming Committee- Member
1999-2001 ALCTS/AS Acquisitions Organization and Management Committee- Member
1999-2002 PCC (Program for Cooperative Cataloging) Standing Committee on Training-
Member
1997-2000 CONSER (Cooperative Online Serials Program) ISSN Task Force- Member
Training and Distance Education
1993-1994 CONSER (Cooperative Online Serials Program) Format Integration Task Force-
Member
1993 CONSER (Cooperative Online Serials Program) Core Record Task Force-
Member
**Regional Selected Activities**

1993-1994  Chair NEFLIN (North East Florida Library Information Network) Union Listing Committee

**State Selected Activities**

2010-      Board of Governor’s Task Force on the Future of Academic Libraries in Florida
           Advisory Group on Medical and Law School Libraries, Lead
2011       SUL CPC ITN Task Force
2007-      SUL CPC Medical/Health Task Force, Chair
2006-      SUL Collection Planning Committee, Member
2006-2008  SUL Technical Services Planning Committee, Chair
1999-      SUL (Statue University Libraries) Technical Services Committee, Member
2001-2003  Co-Chair SUL (State University Libraries) Authority Subcommittee
2002-2003  SUL ILL Committee
1999-2002  SUL LMS Functional advisory group member for Serials/Acquisitions and Cataloging
1998-1999  Chair, Florida Library Association Serials Interest Group

**University Selected Activities**

2006-      UF Libraries Electronic and Continuing Resources Policy Committee
2005-2007  UF Libraries Faculty Assembly By-Laws Committee
2003-2006  UF Libraries Continuing Resources Policy Committee
2006-2007  University of Florida Libraries Tenure & Promotion Committee
2004-2005  UF Libraries Institutional Repository Task Force
2003-2005  UF ITAC Copyright Subcommittee
1999-2005  UF Health Science Center Libraries Electronic Collection Committee
2001-2004  UF ALEPH (Ex-Libris) Steering Committee
2001-2004  UF IAIMS Project Management Team
2001-2003  UF Libraries Tenure and Promotion Committee
1998-2003  UF Libraries Statistics Committee
2000-2002  UF Libraries Collection Coordinating Committee
2000       UF IAIMS “Access to HSCL Electronic Resources” Planning Team
2000       UF IAIMS “Business Practices Sub-Group”
**Publications & Presentations**

“Curate Data: the E-science World”, July 21, 12:00-1:00, Beyond the SE/A invited webinar (with Michele R. Tennant)

“VIVO: a support tool for e-science and translational research”, contributed poster, International Association of Scientific and Technological University Libraries Annual Conference, West Lafayette, IN, accepted for presentation on 22 June 2010 (with CE Botero [co-presenter], KL Holmes, V Davis, MH Devare, S Russell Gonzalez, M Conlin, VIVO Collaboration)


“Learning from Users to Create Intuitive Resources: Not Seeing the Forest for the Trees”, contributed poster, International Congress on Medical Librarianship, Brisbane, Australia, 3 Sept. 2009 (with G. Hack and M. Tennant)


2004-2008 Reviewed and commented on thirty-eight NISO standards

“Online Journal Usage Statistics for the University of Florida: What We Continue to Learn,” poster presented at the Medical Library Association in May 2006 (co-authored with Steve Carrico, Michele Tennant, and Lenny Rhine)

“Online Journal Usage Statistics for the University of Florida: What We Learned and What Surprised Us”, poster presented at the Medical Library Association Southern Chapter Meeting in October 2005 - *won the 3rd prize for research* - (Co-authored with Steve Carrico, Michele Tennant and Lenny Rhine)

October 2005, invited reviewer with Michele Tennant on proposed changes to the National Library of Medicine’s classification in the areas of proteins and bacteria

January 2005, invited reviewer with Michele Tennant on proposed changes to the National Library of Medicine’s classification in the areas of cells and genetics

“Workshop on Serials Cataloging using CONSER standards,” (co-presented with Lisa Furbotten, Texas A&M) at the *Jornadas de Bibliotecologia of the AMBAC* in Xalapa, Mexico, May 2001.

“The Cuban Exile Newspaper Collection at the University of Miami,” (co-presented with William Brown, University of Miami, FL), at the 1996 USNP annual meeting.
Module 32 (Microform Serials) of the CONSER Cataloging Manual (co-authored with Ruth Haas, Harvard University, and Crystal Graham, University of California, San Diego).


“Cooperative Cataloging at the University of Florida,” (co-presented with Carol Walton at ALA Midwinter 1990).

**Languages**

- **Spanish:** Fluent
- **Portuguese:** Fluent (reading) Proficient (speaking)
Jennifer Ann Lyon
127 SE 16th Ave. #S201
Gainesville, FL 32601
615-542-2960 (Cell), 352-273-8441 (Work)
jennyann67@gmail.com, jalyon@ufl.edu

Education

Degrees
1989 Bachelor of Arts (BA), Biology and Anthropology, Amherst College, Amherst, Massachusetts. May, 1989.

Additional For-Credit Graduate Coursework

Professional Experience

7/23/10 – Clinical Research Librarian
Health Science Center Libraries, University of Florida. PO Box 100206. Gainesville, FL 32610-0206.
Supervisor: Dr. Michele Tennant.

Provides direct support for clinical and translational research through expert searching, information resource training, and other assistance for residents and clinical research faculty. Functions as the liaison to UF’s Clinical and Translational Science Institute and assigned departments in the College of Medicine (Emergency Medicine; Pathology, Immunology and Laboratory Medicine). Acts as the HSCL’s specialist in Evidence-Based Medicine and offers instruction and assistance to HSC faculty, residents and students in the application of medical evidence within the context of direct clinical care. Investigates
and supports the provision of information services through clinical rounding where these services can directly impact clinical decision making. Responsible for special projects as assigned, such as collection reviews, development of web-based resources and service evaluation. Performs scholarly research and provides service at the institutional and professional levels as related to assignment and in accordance with tenure and promotion criteria.

1/10/00-6/30/10  
**Clinical and Bioinformatics Librarian**  
Eskind Biomedical Library, Vanderbilt University Medical Center, Nashville, TN 37323. Supervisor: Sandi Martin.

Provide reference and instruction services to physicians, nurses, biomedical researchers, medical and nursing students, patients and other patrons. Support clinical and laboratory researchers including teaching classes and seminars and providing specialized bioinformatics and clinical research consultation services. Develop and teach training modules on bioinformatics resources and clinical knowledge for all EBL librarians and professional staff. Attend rounds in the Clinical Research Center (2000-2002; 2004), Medical Intensive Care Unit (July-December, 2002), Inpatient Medicine (October 2005-May 2007), the Breast Cancer Tumor Board (May 2007-July 2008), and the Emergency Medicine Department (December 2002-May 2007), and provide filtered full-text literature packets in response to medical team questions. Co-teach a "Filtering the Medical Literature" class for Vanderbilt Medical Students. Participate in library goal projects, write papers for publication in peer-reviewed journals, and assist in grant proposals. Assist in research projects, both within the library and in collaboration with clinical and bioscience personnel.

2002-2008  
**Educational Consultant/Instructor, National Center for Biotechnology Information**  

Teach the NCBI training course, Introduction to Molecular Biology Information Resources (http://www.ncbi.nlm.nih.gov/Class/MLACourse/index.html), at various universities in the US to medical librarians, information specialists and scientists, approximately 1-2 times per year (2003 to 2007). This course covers basic molecular biology and genetics, the NCBI Entrez system, human genome resources, molecular structure viewing and other web-based bioinformatics resources. Develop training materials for the NCBI Advanced Workshop for Bioinformatics Support Specialists (NAWBIS; http://www.ncbi.nlm.nih.gov/Class/NAWBIS/). Participate in designing, developing and teaching the NAWBIS course at the NCBI annually in August of each year (2002 to 2007). Specifically responsible for creating, maintaining, updating and teaching the four-hour modules on Molecular Structure Viewing and Human Genome Resources.

04/93 – 05/97  
**Technical Service Representative**
Answered technical calls from customers providing product and related scientific information; troubleshooting customer's technical difficulties by phone and email. Assisted in editing technical manuals. Wrote production and quality control protocols. Conducted training sessions with international distributors/sales representatives. Monitored Usenet discussions regarding biotech methods and reagents. Experienced with word-processing (MSWord), web searching, and HTML programming. Responsibilities also included laboratory work, both production and quality control, utilizing standard DNA cloning techniques, bacterial culture, bacteriophage lambda growth, genomic library construction, DNA and RNA preparations, protein expression in bacteria, and Ni-column protein purification.

**Additional Work Experience**

5/99 – 12/99  Library Assistant - Coy Carpenter Library; Wake Forest University School of Medicine/North Carolina Baptist Hospital, Winston-Salem, NC.


08/17/98-12/99  Graduate Assistant - University of North Carolina - Greensboro. Dept. of Library and Information Studies.


**Publications**

Wimsett JD, Takata Y, Lyon, JA, Theriaque DW, Kolb HR, Bajwa W. Surveying attitudes and perceptions regarding an actual conflict of interest policy at a large academic medical center. Submitted to BMC Medical Ethics, July 2011.


*Invited paper*

*Invited paper*

*This invited paper was part of the JMLA focus issue on Bioinformatics Services in Medical Libraries.*

*Invited paper*


*Invited Editorial*


Grants
06/10/06 “Information hubs” for molecular biology databases and software” and “Molecular structures: retrieval and visualization”. NN/LM Training Grant to teach at the Special Libraries Association Annual Conference, Baltimore, MD. MR Tennant and JA Lyon co-PIs. Submitted 15 Mar. 2006; funded for 10 June 2006. $500
08/98 Ellen Tucker Lyon Graduate Fellowship. Library and Information Science, University of North Carolina-Greensboro.
08/98 Parrot Library School Fellowship. Department of Library and Information Science, University of North Carolina-Greensboro.
07/90 N.I.H. National Research Service Award for Training in Cellular and Molecular Biology.
04/89 Amherst College Memorial Fellowship.
Summer 88 Dana Foundation Undergraduate Research Grant, Princeton University, Princeton, NJ.

Professional Memberships/Certifications
- Academy of Health Information Professionals (AHIP). Member. 1 Sept 2010-
- Medical Library Association
  - Molecular Biology and Genomics Special Interest Group of the MLA - Convener 2001-2003
  - Facilitating Roundtable on "Expert Searching" May 15, 2011
- Member, Continuing Education Committee, February, 2011-April 2012
- Southern Chapter of the Medical Library Association
  - Served on the SC/MLA Research Committee 2000-2001 and 2001-2002

Other Professional Service
- Served as a peer reviewer for the Journal of Medical Ethics, June 23, 2011.

Conference Presentations/Posters
10/2011 "Exploring the Experience of Providing Information Services at the Clinical Point-of-Care”, contributed paper presentation, Southern Chapter of the Medical Library Association, August, GA, October 2011 (JA Lyon [presenter], L Butson, MR Tennant, K Moeller, K Summey, G Kuntz)

10.2011 "Identifying the Health Information Needs of Brain Cancer Patients and Their Caretakers: An Interdisciplinary Collaboration”, contributed paper presentation, Southern Chapter of the Medical Library Association, August, GA, October 2011 (JA Lyon [presenter], J Schumacher, E Dunbar, N Ferree)

05/17/2011 JA Lyon[presenter], N Ferree, LC Butson, K Moeller, K Summey "Scared and Squeamish: Identifying Fears and Barriers to Providing Information Services in the Real World of Rounding", contributed poster, Medical Library Association Annual Conference, Minneapolis, MN.

05/17/2011 Butson LC [presenter], Auten B, Bushhousen E, Ferree N, Jesano R, Lyon JA, Garcia-Milian R, Norton HF, Tennant MR. "You have become a liaison librarian, now what? Getting in and going forward”, contributed poster, Medical Library Association Annual Conference, Minneapolis, MN.


03/27/09 Lyon, Jennifer. “Introduction to Searching Literature Databases.” National Kidney Foundation Conference, Opryland Hotel, Nashville, TN.

05/3/03 Lyon, J, Jerome, R, Koonce, T, Westlake M, Giuse, N. "Evaluating a modular curriculum designed to create the new bioinformationist professional." Medical Library Association Conference. Session: Bioinformatics: A New Wave of Research, A New Wave of Service.

05/3/03 "The Influenza Vaccine: The Eternal Battle." Medical Library Association Annual Conference. Session: Through Tempests and Storms: Vaccines, Biological, Patient Education, and Environmental Health. San Diego, CA

"Train-the-Trainer in Bioinformatics: Collaborating with the NCBI." Department of Biomedical Informatics Seminar. Vanderbilt University Medical Center.


Lyon, J, Sathe, N, Giuse, N. "Incorporation of Molecular Biology Subject Training into a Continuous Process of Staff Development." Medical Library Association Conference.

"Resources for Genetic Medicine." Medical Library Association Annual Conference. Session: Gene Therapy: We're Only At the Beginning.

Presentation on the use of the NCBI Entrez & BLAST systems at the Genetic Analysis of Complex Human Diseases Symposium, Vanderbilt University Medical Center.

Graduate Student Presentation of original scientific research at the Conference of Research Workers in Animal Disease. Chicago, IL

Graduate Student Presentation of original scientific research at the Conference of Research Workers in Animal Disease. Chicago, IL

Graduate Student Presentation of original scientific research at the American Society of Virology annual conference. Fort Collins, CO.

Teaching Experience


- 07/14/2011  "Has It Been Done Before?"
- 07/21/2011  "Library and Reference Resources"

"Teaching Clinical Skills to Medical Librarians" Medical Library Association Continuing Education Course.

- 05/17/08    MLA Annual Meeting, Chicago.
- 10/19/08    North Atlantic Health and Science Libraries. Lowell, MA
- 04/3/09     Univ. of Maryland, Baltimore.
- 09/10/10    Borland Medical Library, University of Florida-Jacksonville, Jacksonville, FL
- 09/23/10    Health Science Center Library, University of Florida, Gainesville, FL

Congress on Medical Librarianship 2009, Brisbane, Australia. Taught via Telecommunication.


"Introduction to Molecular Biology Resources" NCBI/MLA 3-Day Continuing Education Course.

- 04/14-16/08 Washington University School of Medicine.
- 03/14-16/07 Emory University
- 04/4-6/05 Vanderbilt University Medical Center.
- 11/2-4/05 Houston Academy Medicine.
- 06/14-17/04 University of Seattle-Washington
- 11/17-19/03 Pacific Southwest Regional Medical Library (PSRML). UCLA


06/10/06 "Molecular Structures: retrieval and visualization."


05/02 Giuse, NG, Jerome, BJ, Koonce, T, Martin, S, Lyon, J. "Quality Filtering: Critical Appraisal and Synthesis of Biomedical Literature." Medical Library Association Conference, Dallas, TX - Continuing Education Course.

10/17/02 "Molecular Biology for Librarians." Continuing Education Course, 4 hours. Southern Chapter of the Medical Library Association. Nashville, TN.

10/17/02 "Information Hubs." Continuing Education Course, 4 hours. Southern Chapter of the Medical Library Association. Nashville, TN.

05/00 Use of Public Health Electronic Resources. Tennessee Partners for Public Health.

**Attended Continuing Education**


Spring 2008 "Introduction to Bioinformatics." Graduate School Course in the Department of Biomedical Informatics. Vanderbilt University Medical Center. Audited.
9/28-10/5/03  "Medical Informatics." National Library of Medicine Fellowship at the Marine Biological Laboratory, Woods Hole, MA.


05/25/01  Teaching the Adult Learner. Medical Library Association Continuing Education Course. MLA Annual Conference.

07/25/00  "Intermediate HTML 4." New Horizons Computer Learning Center.

05/06/00  Certified Adult Literacy Tutor, Nashville Adult Literacy Program, Laurbach Literacy International.

**Awards**

11/92  American Society of Veterinary Microbiologists Award for Outstanding Student Presentation in Immunology, Conference of Research Workers in Animal Disease.

11/90  M.S. Hofstad Award for Student Achievement in Avian Medicine. Conference of Research Workers in Animal Disease.

Spring 88  William C. Young Prize for Biology, Amherst College.

05/16/85  Valedictorian. South Broward High School. Hollywood, FL.

*Last Updated: 08/09/2011*
Rolando García Milián
2427 NW 29th PL Gainesville, FL 32605
cellular: 203-415-1506
e-mail: Rolando.milian@ufl.edu

EDUCATION
May 2011   MLIS. School of Communication, Information and Library Science, Southern Connecticut State University, CT
Best Academic Student Award of the ILS Department.

July 1992   Bachelor of Science, Department of Biology, University of Havana, Cuba
Senior Thesis: Regulation of Human Papillomavirus Type 18 Expression by Alpha Interferon.

Association for Research Libraries Diversity Scholar 2009-2011

PROFESSIONAL MEMBERSHIP
Member of American Library Association, Division: RUSA since 2008
Member of the Medical Library Association since 2010
Member of the Special Libraries Association, Biomedical and Life Science Division since 2010

FOREIGN LANGUAGES
- Spanish, native-speaker; Portuguese, reading and translating proficiency
- English, fluent speaker, writer and reader
- French, reading proficiency

EMPLOYMENT
Visiting Assistant University Librarian (Basic Biomedical Sciences Librarian/Liaison) University of Florida Health Science Center Libraries, 16 August 2010 to the present

Catalog Assistant 4, Catalog Department, Sterling Memorial Library, Yale University, 2 September 2008 to July 2010

Assistant, Library Shelving Facility, Yale University, 18 February to 18 August 2008.

Founder and Director of Art-Havana, 2000 to the present. See www.art-havana.com.

Spanish language and writing instructor, 2006 to July 2008.
Research Associate, Center for Genetic Engineering and Biotechnology, Havana, Cuba, 1992 to 1999. Please note: In 2000, I was the subject of a broad political purge, along with several of my colleagues, orchestrated by the Cuban Communist Party in that year. As a result, I was not only purged from my position as a researcher at Cuba’s top genetics laboratory but banned from working in science anywhere in the country. Please see explanatory documents attached or (Jose de la Fuente. “Wine into vinegar—the fall of Cuba's biotechnology”, Nature Biotechnology 19, 905 - 907 (2001))

Creation of Web-based Catalogues for Cuban Artists
(See www.art-havana.com)

Translations
Lillian Guerra, “‘Una Buena foto es la mejor defensa de la Revolución’: Imagen, Producción de Imagen y la Imaginación Revolucionaria de 1959”, Encuentro de la Cultura Cubana, Vol 43: 2006, p.11-21

Scientific Research Experience
Sep 1991- March 1992 In vitro regulatory mechanisms of human papillomavirus expression by Interferon. Department of Cellular Biology, Center for Biological Research (CIB), Havana


Sept 1995 - April 1999  Study of Human Papillomavirus prevalence in Papillomavirus-Associated diseases of Head and Neck. Regulatory mechanism of HPV expression by Interleukin 2 in HPV-derived cervical cancer cell lines. Department of Cellular Biology, Center for Biological Research

Jan 1996 - April 1999  Characterization of a bacterial-derived compound with cytotoxic and antitumor properties. Department of Cellular Biology, Center for Biological Research and Center for Genetic Engineering and Biotechnology, Havana.

**Scientific Grants**

1997  Grant from The Third World Academy of Sciences (TWAS) No. 96-091 RG/BIO/LA.
- Received award as Principal Investigator.
- Title: Modulation of Human Papillomavirus Expression by Human Interleukin-2 in Cervical Carcinoma Cells.

1998  The Yamagiwa Yoshida Memorial International Cancer Study Grant, awarded by International Union Against Cancer.
- Received award as Principal Investigator to carry a research project at the Department of Immunology, Institute of Molecular Genetics, Academy of Sciences, Prague, Czech Republic.
- Award rescinded by the Cuban Communist Party that for political reasons refused to acknowledge the grant.

**Honors**

2011  Best Academic Student Award. School of Communication Information, and Library Science, Southern Connecticut State University.

1994  Honor granted by the Center for Genetic Engineering and Biotechnology (Havana) concerning the work “Modulation of HPV-16 mRNA in Cervical Cancer Patients by IFN Treatment”

1996  Honor granted by the Cuban Academy of Sciences concerning the work “IFN as Modulator of HPV Expression in vivo and in vitro”

**Scientific Patent**


**Publications**

1. Garcia-Milian, R., Norton, HF, Tennant, MR. The presence of academic health science libraries on Facebook: the relationship between content and library popularity. *Medical Reference Services Quarterly (Submitted)*


**Presentations at Conferences & Meetings**


Hannah Friggle Norton, M.S.I.S.  
Curriculum Vitae

CONTACT INFORMATION:
Health Science Center Libraries, University of Florida, P.O. Box 100206, Gainesville, FL 32610  
Phone: (352) 273-8412; Fax: (352) 846-2272; Email: nortonh@ufl.edu

EDUCATION:

M.S.I.S.  The University of Texas at Austin; Austin, TX  August 2009
Major: Information Studies

B.A.  Carleton College; Northfield, MN  June 2005
Major: Biology

EXPERIENCE:

Assistant University Librarian, Health Science Center Libraries, University of Florida, Gainesville, FL (March 2011 - )
• Provide liaison librarian services to the College of Veterinary Medicine, Department of Medicine, and College of Medicine Class of 2015. Liaison services include instruction, consultation, collection development, and other client-centered services.
• Provide on-call, by appointment, and e-mail reference services to faculty, students, and staff of the University of Florida Health Science Center.
• Participate in instruction programs using traditional classroom methods and educational technologies.
• Perform scholarly research and provide service at institutional and professional levels.

Visiting Assistant University Librarian, Health Science Center Libraries, University of Florida, Gainesville, FL (Dec. 2009 – March 2011)
• Provided liaison librarian services to the College of Veterinary Medicine, Department of Medicine, and Junior Honors program. Liaison services include instruction, consultation, collection development, and other client-centered services.
• Provided on-call, by appointment, and e-mail reference services to faculty, students, and staff of the University of Florida Health Science Center.
• Participated in instruction programs using traditional classroom methods and educational technologies.

Graduate Research Assistant, Reference and Information Services, The University of Texas Libraries, Austin, TX (Sept. 2008 – Aug. 2009)
• Provided reference services via chat to students and faculty at the University of Texas at Austin and patrons of all other University of Texas System libraries.
• Responded to and provided referrals for email reference questions from the University of Texas community and members of the public.
• Provided one-on-one instruction in the use of the library catalog, indexing and abstracting databases, and formulating searches through in-person reference interactions.
PRESENTATIONS, SPEECHES, POSTERS, AND GUEST LECTURES:

International Meetings:

**Refereed Presentations:**


**Refereed Posters:**


National Meetings:

**Refereed Presentations:**


**Refereed Posters:**


M Conlon, H Norton, R Garcia-Milian, M Tennant, KL Holmes, VIVO Collaboration. “VIVO: Researcher Networking and Discovery Across Disciplines”, contributed poster, Association of


**Regional Meetings:**

**Presentations:**


**Referred Posters:**


**Local Meetings:**

**Presentations:**

HF Norton, C Case, K Blackburn. “VIVO One Year Later”, invited presentation, UF Health Science Center Symposium for Teaching & Learning with Technology, Gainesville, FL, March 11, 2011. Available at: [http://tinyurl.com/4nek8kj](http://tinyurl.com/4nek8kj)

**Posters:**


**Guest Lectures/Seminars:**


**CREATIVE WORKS:**


Norton, HF College of Veterinary Medicine and Department of Medicine Subject Guides (created 2010). [http://libguides.library.health.ufl.edu/profile.php?uid=19971](http://libguides.library.health.ufl.edu/profile.php?uid=19971)

LIBRARY ORIENTATIONS, COURSE-INTEGRATED INSTRUCTION, AND STAND-ALONE CLASSES TAUGHT:

Library Orientations and Course-Integrated Instruction:
- Orientation, Doctor of Veterinary Medicine students
- Orientation, Dentistry Summer Research Program students
- Orientation, Surgery Fellows
- Orientation, College of Medicine Class of 2015 students
- Evidence-based medicine resources, Gastroenterology Fellows
- Introduction to PubMed, Junior Honors Medicine Program students
- Finding Genetics Information and Using EndNote Web, Junior Honors Medicine Program students
- TOXNET and Beyond, Ecotoxicology graduate students
- Library resources for research, Doctor of Veterinary Medicine Merial Summer Research students

Stand-alone Classes:
- EndNote Basics
- Introduction to PubMed

AWARDS AND HONORS:

2011   Fellow (competitive program)
       BioMedical Informatics
       Sponsored by the National Library of Medicine, held at Woods Hole, MA (May 29-June 4, 2011)

GRANTS:

Funded:

“Frankenstein Speaker and Film Series.” Center for the Humanities and the Public Sphere. B Auten, HF Norton, MR Tennant, Co-PIs. Funded for May-June 2011. $2500.


Not Funded:


PROFESSIONAL ASSOCIATION ACTIVITIES:
American Library Association, member, 2008 – present.
Association for College and Research Libraries (Instruction Section, Science and Technology Section), member, 2008 – present.
Reference and User Services Association, member, 2008 – present.
Social Responsibilities Round Table, member, 2008 – present.

Florida Health Science Library Association, member, 2010 – present.

Medical Library Association, member, 2010 – present, member of Membership Committee 2011.
   Educational Media & Technologies Section, member, 2010 – present.
   Veterinary Medical Libraries Section, member, 2010 – present, member of Committee on Committees 2011, reviewer of section program abstracts November 2010.
   Southern Chapter, member 2010 – present.


UNIVERSITY SERVICE:

University:
   College of Veterinary Medicine Curriculum Committee, member, Jan. 2010 – present.
   Institutional Animal Care and Use Committee, consultant, March 2011 – present.

Health Science Center Libraries:
   Communications Committee
      Member, Jan. 2010 – present
      Chair, June 2010 – present


CONTINUING EDUCATION CLASSES/TRAININGS:

Classes and Trainings Taken:

Marketing As If Your Library Depended on It; Medical Library Association Annual Conference; Minneapolis, MN; 5/14/2011 (6 contact hrs).
Medical Library’s Role in E-science and Data Sharing; Medial Library Association Annual Conference; Minneapolis, MN; 5/13/2011 (8 contact hrs).
Shifting Skills to Navigate the Changing Horizon: Finding Our Way in New Biomedical Research and Health Care Environments; Medial Library Association webcast; 4/20/2011 (3 contact hrs).
NLM Training: TOXNET and Beyond; Gainesville, FL; 12/2/2010 (6.0 contact hrs).
Teaching Clinical Skills to Medical Librarians; Health Science Center Library, Gainesville, FL; 9/23/2010 (6 contact hrs).
Effective Training Design; Medical Library Association Annual Conference; Washington, DC; 5/21/2010 (8 contact hrs).
NLM Training: PubMed; Chapel Hill, NC; 4/16/2010 (7.5 contact hrs).
NLM Training: NLM Gateway & ClinicalTrials.gov; Chapel Hill, NC; 4/15/2010 (3.5 contact hrs).
Now's the Time: Understanding the Electronic Health Record Maze & Health Sciences Librarians' Roles; Medical Library Association webcast; 3/24/2010 (3.5 contact hrs).
40-Hour Basic Mediation Training; Center for Public Policy Dispute Resolution; University of Texas School of Law; December 2006.

Classes and Trainings Taught:

Creating Your VIVO Marketing & Outreach Plan; Second Annual VIVO Conference; Washington, DC; accepted for presentation 8/24/3011.

August 30, 2011 version of this file
Michele Renee Tennant, Ph.D. M.L.I.S.
Health Science Center Libraries
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(352) 273-8426
tennantm@ufl.edu
26 August 2011

EDUCATION:

MLIS University of California, Los Angeles Dec. 1994
Major: Library and Information Science

PhD Wayne State University Dec. 1991
Major: Biology
Minor: Chemistry

BS University of Southern California Dec. 1982
Major: Biological Sciences

DISSERTATION:

*Phylogenetic Systematics of the Picinae.* Mitochondrial DNA restriction fragment and allozyme data were collected and analyzed to build phylogenetic trees of woodpecker relationships.

CURRENT APPOINTMENTS:

University Librarian (Tenured), Health Science Center Libraries (HSCL) and UF Genetics Institute (UFGI), University of Florida, Gainesville, FL (2006 -)

Joint Appointment, Department of Molecular Genetics and Microbiology, College of Medicine, University of Florida, Gainesville, FL (2003 -)

PROFESSIONAL INFORMATION WORK EXPERIENCE:

University Librarian, Health Science Center Libraries and UF Genetics Institute, University of Florida, Gainesville, FL (July 2006 -)

Bioinformatics and genetics information specialist; provides instruction in National Center for Biotechnology Information (NCBI) and other research database resources; literature searching; resource selection (basic science materials, primarily genetics, molecular biology and bioinformatics); information consultations; website design; coordinates UFGI seminar series; library liaison services to basic science departments in the College of Medicine and UF genetics researchers; committee work. Assistant Director for Reference, Education, and Information Management Department effective 2 Feb. 2009 –; provides planning leadership and supervises
five professionals.

Associate University Librarian, Health Science Center Libraries and UF Genetics Institute, University of Florida, Gainesville, FL (July 2002 – June 2006)

Bioinformatics and genetics information specialist; provides instruction in National Center for Biotechnology Information (NCBI) and other research database resources; literature searching; resource selection (basic science materials, primarily genetics, molecular biology and bioinformatics); information consultations; website design; coordinates UFGI seminar series; library liaison services to basic science departments in the College of Medicine and UF genetics researchers; committee work.


Bioinformatics and genetics specialist; cataloging, reference, computer bibliographic and genetic database searching; selection of resources, bibliographic instruction, library liaison services, committee work.


Cataloging and reference services.

Prospect Researcher, University of Florida Foundation, Gainesville, FL (Feb. - July 1995)

Online and Internet searching; report writing.


Reference services (15 hrs/week).

PUBLICATIONS:

Refereed Publications:

Refereed Journals:

Tennant MR, Edwards M, Miyamoto MM. Enhancing through “E-learning” the library’s role in instruction. *J Med Librar Assoc*, in review

Tennant MR, Edwards M, Miyamoto MM. Redesigning a library-based undergraduate genetics class through instructional theory and authentic experience. *J Med Librar Assoc*, in review


Invited paper


This paper has been approved for the Medical Library Association’s Independent Reading Program (IRP). Participating readers receive 1 MLA continuing education credit for reading and analyzing the paper.

Invited paper

This invited paper was part of the JMLA focus issue on Bioinformatics Services in Medical Libraries.

Invited paper

This invited and refereed paper was part of RSR’s “Special Issues on Emerging Roles of Health Sciences Librarians”. The editors of the issues (Jean P. Shipman and Sarah B. Watstein) were awarded the Medical Library Association’s 2006 Ida and George Eliot Prize, “presented annually for a work published in the preceding calendar year that has been judged most effective in furthering medical librarianship.”


   American Library Association “LIRT Top Twenty” paper


   Featured in 2002 in a National Network of Libraries of Medicine online journal club with over 70 participants.


Refereed Proceedings:


CVCTSA2011


Tennant MR. 1997. The Internet in the library/classroom: genetics at the University of Florida. p.57-75 in "From Reactive to Proactive: Substantive Approaches to Incorporating the Internet into Biological, Medical, and Life Sciences Libraries: Proceedings of the Contributed Paper Session, Biological Sciences Division, Special Libraries Association, 88th Annual Conference"

Non-refereed Publications:


This submission was invited by the journal’s Associate Editor and reviewed by the journal’s Editor.
PRESENTATIONS, SPEECHES, POSTERS, AND GUEST LECTURES:

International Meetings:

Invited Presentations:

“Molecular biology and genetics for librarians”, invited instructor, Continuing Education Course, 9th International Congress on Medical Librarianship, Salvador, Bahia, Brazil, 23 Sept. 2005

Invited Session Moderator:

“Human resources development”, invited session moderator, 9th International Congress on Medical Librarianship, Salvador, Bahia, Brazil, 21 Sept. 2005

Refereed Presentations:

“A library-based bioinformatics program for first-year medical students”, contributed paper, 9th International Congress on Medical Librarianship, Salvador, Bahia, Brazil, 21 Sept. 2005 (with MJ Koroly)

“TAILor-made: the enhancing of a liaison program to meet the needs of veterinary clinicians and researchers”, contributed presentation, 8th International Congress on Medical Librarianship, London, UK, 3 July 2000 (with TM Tobin [presenter])

Refereed Posters:

“VIVO: a support tool for e-science and translational research”, contributed poster, International Association of Scientific and Technological University Libraries Annual Conference, West Lafayette, IN, 22 June 2010 (MR Tennant [co-presenter], CE Botero [co-presenter], KL Holmes, V Davis, MH Devare, S Russell Gonzalez, M Conlon, VIVO Collaboration)

“Learning from users to create intuitive resources: not seeing the forest for the trees”, contributed poster, International Congress on Medical Librarianship, Brisbane, Australia, 3 Sept. 2009 (with C Botero and GO Hack)

“Library-based support for clinical and translational science initiatives: the University of Florida experience”, contributed poster, International Congress on Medical Librarianship, Brisbane, Australia, 3 Sept. 2009 (with W McLendon)

“Reporting structure of academic health science libraries”, contributed poster, International Congress on Medical Librarianship, Brisbane, Australia, 3 Sept. 2009 (with AG Buhler, N Ferree, and TT Cataldo)

“Using “E-Learning” technology and presentation software to enhance genetics education”, contributed poster, International Congress on Medical Librarianship, Brisbane, Australia, 3 Sept. 2009 (with MM Miyamoto [presenter] and MG Horrell)
“The medical library’s role in graduate bioinformatics education: applications of bioinformatics to genetics”, refereed contributed poster, 9th International Congress on Medical Librarianship, Salvador, Bahia, Brazil, 21-23 Sept. 2005 (with MM Miyamoto [co-presenter], L Zhou, and HV Baker)

“Advanced workshop for bioinformatics information specialists: an educational collaboration”, refereed contributed poster, World Library and Information Congress: 69th IFLA General Conference and Council, Berlin, Germany, 5-6 Aug. 2003 (with N Gaedeke [presenter], K Alpi, J Lyon, J Ohles, D Osterbur, and RC Geer)

National Meetings:

Invited Panelist:


“Strategies for library support for research”, Association of Research Libraries Membership Meeting, St. Louis, MO, 23 May 2007


“Building bridges to our users: liaison, outreach and marketing programs that work”, Special Libraries Association Annual Conference, San Antonio, TX, 10 June 2001


Invited Presentations:


“Genomics, proteomics and structure resources”, Special Libraries Association Annual Conference, Los Angeles, CA, 12 June 2002

“Molecular medicine in the age of genomics”, Special Libraries Association Annual Conference, Los Angeles, CA, 10 June 2002

CVCTSA2011
“Bioinformationist”, at “The Informationist” invitation-only conference, National Library of Medicine, Bethesda, MD, 4 Apr. 2002

“Molecular biology and genetics resources”, Special Libraries Association Annual Conference, Philadelphia, PA, 12 June 2000

**Referred Presentations:**

“Library-based support for clinical and translational research: the informationist”, contributed panelist and moderator, Clinical Research Informatics Summit of the American Medical Informatics Association, San Francisco, CA, 10 Mar. 2011 (MR Tennant, KL Holmes, L Johnson, JA Lyon [co-presenters])

“Letting the good times roll through alignment: meeting institutional missions and goals with VIVO, a web-based research discovery tool”, contributed presentation, Contributed Papers Session, Special Libraries Association, 101th Annual Conference, New Orleans, LA, 15 June 2010 (Russell Gonzalez S [co-presenter], Davis V [co-presenter], Tennant MR, Holmes KL, Conlon M, VIVO Collaboration)

“VIVO: a national resource discovery tool for the biomedical community”, contributed presentation, Biomedical and Life Sciences Division’s Contributed Papers Session, Special Libraries Association Annual Conference, New Orleans, LA, 14 June 2010 (MR Tennant [co-presenter], KL Holmes [co-presenter], S Russell Gonzalez, V Davis, MH Devare, Hack GO, M Conlon, VIVO Collaboration)


“Implementation of a new research discovery tool by the university libraries at Cornell Division, Special Libraries Association Annual Conference, Washington, D.C., 15 June 2009 (with V Davis [presenter], M Devare [presenter], and SR Gonzalez)


“The Institutional Review Board and library research: memoirs of a multi-site project”,

CVCTSA2011
contributed paper, Biomedical and Life Sciences Division, Special Libraries Association Annual Conference, Seattle, WA, 16 June 2008

“Take one tier and call me in the morning: codifying levels of liaison service”, contributed paper, Medical Library Association Annual Conference, Chicago, IL, 20 May 2008 (with LC Butson, N Ferree, and N Schaefer)


“The Ph.D. experience: graduate school in the basic biomedical sciences”, Continuing Education Course, Medical Library Association Annual Conference, Chicago, IL, 17 May 2008; Phoenix, AZ, 20 May 2006 (with K Messner and S Kendall [co-presenters and co-course developers]

“Partnerships in instruction: teaching dogs old and new, local and distant”, contributed paper, Special Libraries Association Annual Conference, Nashville, TN, 8 June 2004 (with AG Buhler, N Ferree [co-presenter], BW Francis, PP Hsu, R Jesano, B Layton, N Schaefer, P Sherwill, TT Cataldo, and G Hack)

“Phylogenetics and systematics for information professionals: science and resources”, Continuing Education Course, Special Libraries Association Annual Conference, Nashville, TN, 5 June 2004 (with MM Miyamoto [co-presenter])

“A library-based bioinformatics educational program for students, researchers, and clinicians”, contributed paper, Medical Library Association Annual Conference, Washington, DC, 25 May 2004

“Genomics, proteomics, and bioinformatics for librarians”, Continuing Education Course, Medical Library Association Annual Conference, Washington, DC, 22 May 2004; San Diego, CA, 2 May 2003

“Molecular biology and genetics for librarians”, Continuing Education Course, Medical Library Association Annual Conference, Washington, D.C., 21 May 2004; San Diego, CA, 2 May 2003; Dallas, TX, 18 May 2002; Special Libraries Association Annual Conference, Philadelphia, PA, 11 June 2000

“Bridging the molecular gap: understanding and identifying the standard protocols and experiments for molecular biology”, Continuing Education Course, Medical Library Association Annual Conference, Orlando, FL, 25 May 2001

“Course-integrated instruction in an academic health science library: innovation in basic sciences and clinical sciences”, contributed paper, Special Libraries Association Annual Conference, Minneapolis, MN, 9 June 1999 (with BW Francis)

“The Internet in the library/classroom: genetics at the University of Florida”, contributed paper,
Special Libraries Association Annual Conference, Seattle, WA, 11 June 1997

Refereed Posters:

“VIVO: support for translational research”, contributed poster, Translational Bioinformatics Summit of the American Medical Informatics Association, San Francisco, CA, 7 Mar. 2011 (MR Tennant [co-presenter], KL Holmes [co-presenter], C Barnes, V Davis, S Russell-Gonzalez, L McIntosh, S Mitchell, M Conlon, VIVO Collaboration)


“‘It takes a village’: implementation of VIVO at the University of Florida”, contributed poster, First Annual VIVO Conference, New York, NY, 12 Aug. 2010 (AG Buhler, VI Davis, S Russell Gonzalez, M Johnson, H Norton [co-presenter], MR Tennant [co-presenter], S Henning, M Conlon, VIVO Collaboration)

“Meeting institutional missions and goals with VIVO, a web-based research discovery tool”, contributed poster, All Sciences Poster Session, Special Libraries Association Annual Conference, New Orleans, LA, 14 June 2010 (MR Tennant [co-presenter], KL Holmes [co-presenter], V Davis, MH Devare, S Russell Gonzalez, M Conlon, VIVO Collaboration)

“VIVO: a resource for research discovery at the local and national level”, contributed poster, Medical Library Association Annual Conference, Washington, DC, 24 May 2010 (KL Holmes [presenter], MR Tennant, C Barnes, N Cappadona, BD Caruso, J Corson-Rikert, VI Davis, MH Devare, C Haines, DB Krafft, Y Li, BJ Lowe, N Raum, S Russell Gonzalez, SV Williams, M Conlon, VIVO Collaboration)

“Reflecting and connecting through change and technology – undergraduate genetics at the University of Florida”, contributed poster, Medical Library Association Annual Conference, Washington DC, 24 May 2010 (MR Tennant [presenter], MM Miyamoto, M Horrell)

“VIVO: creating partnerships across disciplines”, contributed poster, United States Agricultural Information Network, West Lafayette, IN, 11 May 2010 (VI Davis [presenter], MH Devare, KL Holmes, S Russell Gonzalez, MR Tennant, M Conlon, VIVO Collaboration)

“VIVO: developing a national network of scientists”, contributed poster, American Association for the Advancement of Science Annual Conference, 21 Feb. 2010 (SR Gonzalez [presenter], MH Devare, V Davis, KL Holmes, MR Tennant, M Conlon, VIVO Collaboration)

“Assessing researchers’ searching skills and attitudes concerning online bioinformatics resources”, contributed poster, All Sciences Poster Session, Special Libraries Association Annual Conference, Washington, DC, 16 June 2009

“How (and how well) do researchers use bioinformatics resources? A preliminary analysis”, contributed poster, Medical Library Association Annual Conference, Chicago, IL, 19 May 2008

“Online journal usage statistics for the University of Florida: what we continue to learn”, contributed poster, Medical Library Association Annual Conference, Phoenix, AZ, 22 May 2006 (with C Botero [co-presenter], S Carrico [co-presenter], and L Rhine)

“Splitting the difference: meeting the diverse information needs of clinicians and researchers in a veterinary medicine library”, contributed poster, Medical Library Association Annual Conference, Chicago, IL, 17 May 1999 (with TM Tobin and PC Williams)

“Outcomes to strategic planning and year one implementation at the University of Florida Health Science Center Library”, contributed poster, Medical Library Association Annual Conference, Chicago, IL, 17 May 1999 (with M Boyle, LC Butson [presenter], BW Francis, JJ Johnson and F Meakin)

“The library in the classroom: genetics at the University of Florida”, contributed poster, Medical Library Association Annual Conference, Philadelphia, PA, 25 May 1998

“Personal attention: merging libraries with medical education and biomedical research”, contributed poster, Medical Library Association Annual Conference, Philadelphia, PA, 25 May 1998 (with LC Butson [presenter])

**Invited Session Moderator:**

“Bioinformatics: a new wave of science, a new wave of service”, Medical Library Association Annual Conference, San Diego, CA, 5 May 2003

“Participating in the genomics age: pharmacogenetics”, Medical Library Association Annual Conference, Dallas, TX, 21 May 2002

**Session Organizer and Moderator:**


“Hancock marine and oceanographic expeditions”, Special Libraries Association Annual Conference, Los Angeles, CA, 12 June 2002
“Innovative applications for digital user services in biomedical and life sciences libraries”, Special Libraries Association Annual Conference, Los Angeles, CA, 12 June 2002

“Organizing biodiversity: systematics from museum to molecule”, Special Libraries Association Annual Conference, San Antonio, TX, 12 June 2001

“Research in toxicology: odyssey into the unknown”, Medical Library Association Annual Conference, Orlando, FL, 29 May 2001

“Gene therapy: it’s only the beginning”, Medical Library Association Annual Conference, Orlando, FL, 27 May 2001


Regional Meetings:

Invited Presentations:

“Curate data: the e-science world”, invited webinar, National Network of Libraries of Medicine, Southeastern Atlantic Region, 21 July 2010 (MR Tennant and CE Botero [co-presenters])


One-hour invited presentation; declined due to scheduling conflict. The Professional Development Day was co-sponsored by the Lamar Soutter Library and the Center for Stem Cell Biology and Regenerative Medicine, University of Massachusetts Medical School.

“Bioinformatics librarian – meeting the information needs of researchers and students”, invited presentation, E-Science Symposium, University of Massachusetts and New England Area Librarian Association, Worcester, MA, 6 April 2009

“Genomics, proteomics, and bioinformatics for librarians”, Continuing Education Course, Medical Library Association Southern Chapter Annual Conference, San Juan, PR, 21 Oct. 2005

“Molecular biology and genetics for librarians”, Continuing Education Course, Medical Library Association South Central Chapter Annual Conference, Shreveport, LA, 4 Oct. 2003

Refereed Presentations:

“Sustaining networks of researchers: experiences of the VIVO collaboration at the University of Florida and the Scripps Research Institute”, contributed presentation, Northern California and Nevada Medical Library Group and the Medical Library Group of Southern California and Arizona Joint Annual Conference, San Francisco, CA, 24 Feb. 2011 (B Auten [presenter], P King, L Butson, H Norton, MR Tennant, M Conlon, VIVO Collaboration)

“Going the distance: VIVO: reaching out to faculty in support of a national network of researchers”, contributed presentation, Mid-Atlantic Chapter, Medical Library Association Annual Conference, Chapel Hill, NC, 15 Oct. 2010 (L Butson [presenter], M Edwards, N Ferree, R Jesano, H Norton, N Schaefer, B Auten, S Henning, MR Tennant, VI Davis, S Russell Gonzalez, AG Buhler, MC Johnson, M Conlon, VIVO Collaboration)


**Refereed Posters:**


“Collaborative training and support for VIVO, a national network of scientists”, contributed poster, Southern Chapter, Medical Library Association Annual Conference, St. Petersburg, Fl, 14 Nov. 2010 (M Edwards [presenter], E Brooks, E Bushhouse, L Butson, N Ferree, R Jesano, S Henning, H Norton, N Schaefer, MR Tennant, B Westauten, M Conlon, VIVO Collaboration)

“Who’s your Daddy? Exploring the reporting structures of academic health sciences libraries”, contributed poster, Medical Library Association Southern Chapter Annual Conference, Charleston, SC, 14 Nov. 2007 (with A Buhler [presenter], N Ferree, and TT Cataldo)

“Online journal usage statistics for the University of Florida Health Science Center”, contributed poster, Medical Library Association Southern Chapter Annual Conference, San Juan, PR, 22 Oct. 2005 (with C Botero [co-presenter], L Rhine, and S Carrico [co-presenter])

*This poster was awarded third place in the research competition.*

“Developing a library liaison program: building bridges to our users”, contributed poster, Medical Library Association Southern Chapter Annual Conference, Lexington, KY, 12 Oct. 1998 (with LC Butson [presenter], P Tucker, M Boyle, M Rezeau, and G Clayton)
Non-conference Presentations:

Invited Off-campus Institutions:


“Bioinformatics resources”, Merck & Co., Inc., West Point, PA, 17 June 2003

“Molecular information services at the University of Florida”, Karolinska Institutet, Stockholm, Sweden, 27 Mar. 2001

“Information resources and services available from the UF Health Science Center Libraries”, Whitney Marine Laboratory, Marineland, FL, 19 Jan. 2001

Invited On-campus Presentations and Panels:


“VIVO: enabling a national network of scientists”, UF Genetics Institute Scientific Advisory Board Meeting, 18 Feb. 2010


“Advanced NCBI searching”, UF HIV Journal Club (GMS6191), 17 Apr. 2009

“Librarian and client perspectives on liaison services and subject specialization”, UF Libraries’ Journal Club, 27 Apr. 2006 (with T. Tobin [co-presenter])

“Getting published”, UF Libraries’ Tenure Support Group, 4 May 2005


Undergraduate Women in Science Symposium, panelist, 20 Mar. 2004
“Bioinformatics and library resources and services at the University of Florida”, Yearly updates to the College of Medicine’s Departments of Anatomy and Cell Biology (2004-7); Biochemistry and Molecular Biology (2003-7); Molecular Genetics and Microbiology (2002-7); and Physiology and Functional Genomics (2002-7)

“HSCL bioinformatics librarian services”, IAIMS grant site visit, 7 Jan. 2002


**On-campus Refereed Posters:**

“Enhancing multi-disciplinary collaboration with VIVO”, contributed poster, Emerging Pathogens Institute Research Day, Gainesville, FL, 10 Feb. 2011 (Norton HF [co-presenter], Garcia-Milian R [co-presenter], Lyon JA [co-presenter], N Schaefer [co-presenter], Tennant MR, Blackburn K [co-presenter], Conlon M, VIVO Collaboration)


**On-campus Exhibits and Posters:**

IDP (College of Medicine Ph.D. Student) Recruitment, Spring semester 2004 and 2005

“HSC Libraries - services and solutions”, UF Health Science Center Technology Fair "E-Health: Science, Services, Solutions", 12 Mar. 2002 (with E Anderson and MM Miyamoto)

Residents’ Fair, 28 June 2001

National Library Week, 20-21 Apr. 1998

“GenBank/BRCA Gene”, power point presentation prepared for the 1997 COMWFA Meeting, 27 Feb.-1 Mar. 1997 (with JM Coggan [presenter])


HIV Update Conference, 22 May 1996

**On-campus Session Organizer and Moderator:**

University of Florida Genetics Institute Seminar Series, series organizer and moderator, Aug. 2002-Aug. 2006; series organizer Aug. 2007 -
Dinner with Dr. Joyce Mitchell (University of Utah, Biomedical Informatics) and HSCL Librarians, session organizer and host, HSC Libraries, 20 Feb. 2005

Tea with Dr. Victor McKusick (Johns Hopkins University; the “Father” of Human Genetics) and HSCL Librarians, session organizer and host, HSC Libraries, 20 Oct. 2004

“Field guide to NCBI resources”, National Center for Biotechnology Information visit to UF, session organizer, moderator, and host. Yearly, 2001 - 2005

“Biological research in the post-genomics world”, UF ICBR Bioinformatics Seminar Series, 4 Nov. 2000, and “University of Washington Health Center Library Bioinformatics Services”, UF HSC Libraries, 3 Nov. 2000; host to Dr. Stuart Yarfitz (University of Washington Bioinformatics Specialist)

CREATIVE WORKS:


Milian R, Tennant MR. Genetics LibGuide (created 2011) [http://guides.uflib.ufl.edu/genetics](http://guides.uflib.ufl.edu/genetics)


GRADUATE COMMITTEES:

Graduate Committee Member, Mary Edwards’ EdD committee, 22 Feb. 2011-

LIBRARY ORIENTATIONS, COURSE-INTEGRATED INSTRUCTION AND STAND-ALONE CLASSES TAUGHT:

From the Fall semester 1995 through 15 Mar. 2011, have taught 1200 hours in 690 sessions to 10,651 attendees.

Library Orientations, Tours, and Course-Integrated Instruction: These classes are integrated into the curriculum. In most cases, they involve the creation and teaching of the lecture and hands-on learning experiences, the creation and grading of homework assignments, and in-person or e-mail office hours.

Incoming College of Medicine IDP (Ph.D.) Students (multipart orientation and literature databases; for Drs. N. Denslow and W. McCormack; every year since 1996)

PCB3063, General Genetics (literature, bioinformatics, and genetics resources; for Drs. E. Braun, M.M. Miyamoto, and M.L. Wayne; every year for Miyamoto since 1996)

GMS6014, Applications of Bioinformatics to Genetics (bioinformatics resources; with Drs. L. Zhou, M.M. Miyamoto, and H.V. Baker; yearly since 2003)

Incoming Genetics and Genomics Ph.D. Students (multipart orientation and literature databases; yearly since 2009; anti-plagiarism class (2010 -); for Wilfred Vermerris)

Science of Clinical Research Fellows/Clinical and Translational Research Fellows (alternatives to NIH grants; bioinformatics resources); 2005, 2010

CHM4413L, Biophysical Chemistry (literature and structure resources; for Drs. K. Williams and Mine Ucak)

Incoming College of Medicine Junior Honors Students (bioinformatics resources; for Dr. P. McGuire)

First-year Medical Students (bioinformatics and genetics resources; for Drs. M.J. Koroly, J. Resnick, and M. Wallace)

BOT6395, Molecular Evolution, 2005 (bioinformatics resources; for Drs. D. and P. Soltis)

PCB5615, Evolutionary Genetics (genetics resources; for Dr. M.M. Miyamoto)

PHA5171, Pharmaceutical Biotechnology (bioinformatics resources; for Dr. J. Hughes)

CVCTSA2011
Science Quest high school students and Summer Science Institute high school teachers through Center for Precollegiate Education and Training (bioinformatics and genetics resources; for Dr. M.J. Koroly)

CAP5510, Bioinformatics (NCBI resources; 2005, for Dr. S.-S. Chen)

“Stand-alone” Classes: These sessions are available to anyone on campus, and are generally taught once/semester or once/year. They range from 1-2.5 hours in length. Because they are not part of an academic program, they do not include homework assignments. Most of these courses were taught between 1995 and 2008.

Bioethics Resources
Biological Abstracts and BA/RRM
BIOSIS GenRef
BLAST and Sequence Alignment
Genetics Resources for Clinicians
Grants Resources
Introduction to MEDLINE
Molecular Protocol and Model Organism Resources
NCBI’s Genome Resources
NCBI’s Sequence Resources
NCBI’s Structure Resources
NCBI’s Variation Resources
PubMed
Survey of NCBI Resources
Toxicology Resources

INVITED PARTICIPANT/CONSULTATIONS OUTSIDE THE UNIVERSITY:

Regional Medical Library, Planning Group for E-science Boot Camp, invited member, invited to serve Apr. 2010; planning meeting will occur 8 Apr. 2011

Biomedical Library and Informatics Research Committee. Invited member, National Library of Medicine, Bethesda, MD, 3 times per year, Fall 2008-Spring 2012


Planning meeting - Development of advanced course and enhancement of basic course in use of NCBI resources. Invited participant/consultant. National Center for Biotechnology Information, National Library of Medicine, Bethesda, MD, 9-10 Aug. 2001 and 26-29 Mar. 2002

Planning meeting - Scientists’ needs, library roles, and future directions. Invited participant/consultant. National Center for Biotechnology Information, National Library of Medicine, Bethesda, MD, 10-12 Jan. 2001
Visiting Instructor/Consultant, Denison Memorial Library, University of Colorado Health Sciences Center, 26-27 Apr. 1999

AWARDS, FELLOWSHIPS, HONORS:

2010-15  
Distinguished Member Status  
Academy of Health Information Professionals (AHIP; Medical Librarians’ credentialing body).

2006  
Research Award, Third Place  
Southern Chapter of the Medical Library Association  

“Online journal usage statistics for the University of Florida Health Science Center” (with C. Botero [co-presenter], L. Rhine, and S. Carrico [co-presenter]).  
San Juan, P.R., 22 Oct. 2005.

2005-10  
Distinguished Member Status  
Academy of Health Information Professionals (AHIP; Medical Librarians’ credentialing body).

2005  
Distinguished Member Award, Recipient  
Special Libraries Association, Biomedical and Life Sciences Division  

*The Biomedical and Life Sciences Division’s Distinguished Member Award is presented “in recognition of exceptional service to the Division and to the profession”.*

2005  
Estelle Brodman Academic Medical Librarian of the Year Award, Recipient  
Medical Library Association  

*The Estelle Brodman Award recognizes an “academic medical librarian at mid-career level who demonstrates significant achievement, the potential for leadership, and continuing excellence”.*

2003  
Top 20 Library Instructional Paper of the Year  
American Library Association, Library Instructional Round Table (LIRT)  


*The only medical library paper thus honored in 2003.*

2003-  
Joint Appointment  
Department of Molecular Genetics and Microbiology, College of Medicine, University of Florida

2003  
Attendee (competitive program)
Bio21: Teaching Biology with Bioinformatics conference  
University of North Carolina, Chapel Hill, NC (17-18 Oct. 2003)

2000-05  
Senior Member Status  
Academy of Health Information Professionals

1998  
Visiting Scholar  
Medical Sciences Library, University of Puerto Rico, San Juan, PR (9-10 Mar. 1998)

1997  
Superior Accomplishment Award, Division Awardee  
University of Florida

1996  
Fellow (competitive program) 
Medical Informatics: A Course for Health Professionals  
Sponsored by the National Library of Medicine, held at Woods Hole, MA (29 May-5 June 1996)

1993  
Scholarship, Recipient  
Special Libraries Association

FEATURED IN:

Work as “embedded” librarian highlighted in Information Outlook, November 2009 and as research subject in the SLA funded grant “Models of Embedded Librarianship: A Research Proposal” by David Shumaker and Mary Talley (see final report at http://www.sla.org/pdfs/EmbeddedLibrarianshipFinalRptRev.pdf)


“Voices from the Library: A First-hand Guide to Careers in Library and Information Science” (American Library Association book written by Laura Kane, University of South Carolina, 2003)

CONTRACTS AND GRANTS:

Funded:

Grant Period: 9 May - 18 June 2011  
Title: Frankenstein Speaker and Film Series  
Funding Agency: Center for the Humanities and the Public Sphere

Status: Funded 26 Feb. 2011  
Total Award: $2,500  
These funds will be used to bring in external speakers in support of the HSCL’s Frankenstein exhibition  
Role: Co-Principal Investigator
Grant Period: 23 - 25 April 2011
Title: NNL/M Researcher Training Grant
Funding Agency: National Networks of Libraries of Medicine
Status: Funded 20 Dec. 2010
Total Award: $1,000
These funds will be used to bring Dr. Kristi Holmes from Washington University to train UF and other librarians from the state of Florida.
Role: Principal Investigator

Grant Period: 1 Nov. 2010 - 31 Oct. 2011
Title: Analyzing librarian mediated literature searches in the health sciences
Funding Agency: Smathers’ Libraries
Status: Funded 4 Nov. 2010
Total Award: $1,688.00
This project will provide support for retrospective entry of a six-year backlog of archived literature searches and prospective recording of new searches, combined with REDCap data-analysis capabilities. The project will allow Health Sciences librarians to rapidly scrutinize the data to investigate operational facets including user demographics, common types of questions and subjects, reuse of information, workload and training needs. All of these results will increase librarian proficiency and assist in improving library services to the health science center.
Role: Project Team Member

Title: VIVO: Enabling National Networking of Scientists
Funding Agency: National Institutes of Health
Status: Funded
Total Award: $12,300,000
Total Award to UF Libraries: $1,729,030
VIVO is a multi-institutional database that facilitates communication and collaboration across interdisciplinary and institutional boundaries not only for scientists, but also for students, administrators, prospective faculty and students, donors, funding agencies, and the public.
Role: Investigator, Tennant assisted in the writing of the grant, serves as UF Outreach Lead, and as a member of the National Outreach Team.

Grant Period: 1 July 2007-28 Feb. 2011
Title: Assessment of User Skills and Efficiency in the Application of Bioinformatics Resources to Answer Biological Questions
Funding Agency: Medical Library Association
Status: Funded 15 Feb. 2007
Total Award: $25,000
The goal of this project was to learn how scientists use the resources created by the National Center for Biotechnology Information, and to learn more about their perceptions related to library-based bioinformatics services
Role: Principal Investigator
Grant Period: 1 July 2007 - 30 June 2008
Title: Exploring Models of Library-based Bioinformatics Support Programs: Services, Staffing, Training and Funding
Funding Agency: Medical Library Association
Status: Funded 15 Feb. 2007
Total Award: $2000
The goal of this project was to visit three libraries with library-based bioinformatics support services to learn more about service development, staffing, training and funding.
Role: Principal Investigator

Grant Period: 10 June 2006
Title: NN/LM Training Grant
Funding Agency: National Networks of Libraries of Medicine
Status: Funded
Total Award: $500
These funds were used to fund the training classes “Information Hubs for Molecular Biology Databases and Software” and “Molecular Structures: Retrieval and Visualization” at the 2006 Special Libraries Association’s Annual Conference.
Role: Co-principal Investigator

Title: Improvement to Dissertation Grant
Funding Agency: National Science Foundation
Status: Funded
Total Award: $10,000
These funds were used for field and laboratory work for the dissertation project “Phylogenetic Systematics of the Picinae”
Role: Principal Investigator

SOCIETY MEMBERSHIPS, COMMITTEES, OFFICES AND APPOINTMENTS:

Associations:

American Society for Information Science (ASIS; member, 1995-1997):
    Medical Information Systems Division (member, 1995-1997)
    Scientific and Technology Information Systems Division (member, 1995-1997)

American Institute for Biological Sciences (AIBS):
    Publications Committee, member, Mar. 1999-Mar. 2002

Medical Library Association (MLA; member, 1995-):
    Continuing Education Committee, member, May 2009-May 2012
    Continuing Education Committee, IRP Subcommittee, member, May 2009-May 2012


Lucretia W. McClure Excellence in Education Award Jury, member, May 2005-May 2006

Task Force on Information Specialists in Context, member, May 2003-Dec. 2005

Section Program Planners Committee (Orlando 2001), member, May 2000-May 2001

2001 Annual Conference Local Arrangements Hospitality Committee, member, May 2000-May 2001

Pre-credential external reviewer for the Medical Library Association’s Continuing Education course 702, “Research Methods for the Health Sciences Librarian”, 1995

Cancer Librarians Section (member, 2004-)

Molecular Biology and Genomics Special Interest Group (SIG; member, 1997-):

Transforming reference and outreach services for biomedical researchers, 2006 annual conference program, abstract reviewer, Nov. 2005


Program planner (Orlando 2001), June 2000-May 2001

SIG convener, Sept. 1999-May 2001

Symposium Planning Committee, member, 1998 annual conference, Jan.-May 1998

Medical Informatics Section (member, 1995-)

Veterinary Medical Libraries Section (member, 1995-2010)

Technical Services Section (member, 1995-2003)

Special Libraries Association (SLA; member, 1995-):
Biomedical and Life Sciences Division (DBIO; division member, 1993, 1995-; medical section member, 1997-):
- Awards Committee, chair, June 2007-; member, June 2006-Jan. 2007
- Liaison to the Medical Library Association, June 2005-Dec. 2008
- Publications Committee, member, June 2005-Jan. 2008
- Bylaws Committee, chair, June 2002-June 2003; member, June 2003-June 2004
- Fund Development Committee, chair, June 2000-June 2001; member, July 2001-June 2004
- Program Planning Committee (San Antonio 2001), member, Mar. 2000-June 2001
- Contributed Papers Committee, member, June 1999-June 2001; co-chair, June 2001-June 2003
- Program Planning Committee (Philadelphia 2000), member, Mar.1999-June 2000
- Professional Development Committee, member, June 1998-June 2000

Pharmaceutical and Health Technology Division (member, 1995-)

Science-Technology Division (member, 1993, 1995-):
- Liaison to the Medical Library Association, June 1996-May 1999

Museum and Humanities Division (member, 1993, 1995-1996)

INVITED REVIEWER:

Journal of Veterinary Medical Education, article reviewer, Oct. 2010

Briefings in Bioinformatics, article reviewer, May 2010

Partnership: The Canadian Journal of Library and Information Science, article reviewer, March/April 2008


Mednet 2006: 11th World Congress on Internet in Medicine, 2006 annual conference program, abstract reviewer, May 2006
National Library of Medicine, proposed changes to the NLM classification in the areas of bacteria and proteins, reviewer, Dec. 2005 (with C Botero)

National Library of Medicine, Proposed Changes to the NLM Classification in the Areas of Cells and Genetics, reviewer, Jan. 2005 (with C Botero)

BIOL 4005.002 – “Biomedical Sciences Information Management”, undergraduate course for science majors at the University of North Texas, invited pre-reviewer, Aug. 2004

The intent of the course is to recruit science students into library school to become “Bioinformatics Librarians”. The course was grant funded by IMLS

University Committees and Working Groups:

Academic Freedom, Tenure, Professional Relations and Standards Committee, member, Aug. 2008-May 2011

Future of the Libraries Task Force, member, June-Dec. 2006 (provost-appointed task force)

Faculty Senate, member, Aug. 2005-July 2006; Aug. 2007-July 2008

Bioinformatics Initiative Planning Group, Academic Program Subgroup, member, Apr.-June 2001

Bioinformatics Initiative Planning Group, member, Dec. 2000-June 2001

Health Science Center Committees and Working Groups:

AHC (Academic Health Center) Research IT Advisory Committee, member, Feb. 2011 –


Biomedical Informatics Interest Group, member, Nov. 2009 –


Health Science Center Libraries Director Search Committee, member, Jan. – Dec. 2007


University Library Committees:

Smathers’ Libraries Sabbatical Committee, member, Sept. 2010 –
Smathers’ Libraries Sustained Performance Evaluation Program Committee, member, May 2010 –

UF VIVO Outreach Team, lead, Oct. 2009 –

VIVO National Outreach Committee, member, Oct. 2009 –


Smathers’ Libraries AGRSSR, as needed substitute for Cecilia Botero, Mar. 2009 –

Smathers’ Public Services/Collection Management Integration Committee, member, Dec. 2008-Mar. 2009


University of Florida Libraries Faculty Assembly, member, June 2006-

Nominations Committee, chair, Feb.-Mar. 2006


“Distinction” Committee, member, May-Sept. 2005


Serials Policy Committee, member, May 1996-May 1997

**Department Committees:**

**UF Genetics Institute:**

Florida Genetics 2012, Organizing Committee, co-chair, Jan. 2011 –

Florida Genetics 2011, Organizing Committee, co-chair, Jan. 2010 – Nov. 2011

Florida Genetics 2010, Organizing Committee, co-chair, July 2009 – Nov. 2010


Florida Genetics 2007, Planning Committee, member, Feb.-Nov. 2007

Genetics Degree Program Curriculum Committee, member, Feb. – Aug. 2006
National Library of Medicine’s Bioinformatics Training Grant, Proposal Writing Committee, member, Jan.-Mar. 2006

Florida Genetics 2006, Planning Committee, member, Feb.-Nov. 2006

Bioinformatics Functional Genomicist, Faculty Search Committee, member, May-Sept. 2005

Florida Genetics 2005, Planning Committee, member, May-Dec. 2005


Strategic Plan Working Group, member, Oct. 2003 - Apr. 2004


Seminar Series, organizer and moderator, July 2002 - Aug. 2006

Executive Committee, member, Aug. 2001 - Aug. 2006

Health Science Center Libraries:

Clinical Librarian – Borland, Search Committee, member, June 2010 – Dec. 2010


Library Operations Committee, member, Feb. – Nov. 2009

Policy Steering and Progress Committee, member, Mar. 2008-

Director’s Planning and Strategies Sessions, member, Mar. 2008 – Nov. 2009


Faculty Assembly, member, June 2006-

Basic Sciences Librarian Search Committee, member, May-Aug. 2006

Collections Coordinating Committee, member, Mar.-Aug. 2006


Education Coordinator Search Committee, member, Dec. 2003-Mar. 2004

Holiday Party Committee, member, June-Dec. 2003

Basic Sciences Librarian Search Committee, member, Aug.-Dec. 2001

Liaison Evaluation Work Group, chair, Jan. 2001-July 2005

Assistant Director for REIM Search Committee, member, Nov. 2000-July 2001

Webmaster Search Committee, member, Apr. 2000-Feb. 2001

Staff Development Committee, member, Mar. 2000-July 2001

Associate Director Search Committee, member, Aug.-Sept. 1999

Reference Librarian Search Committee- position IV, member, June-Sept. 1999

Reference Librarian Search Committee- position III, chair, Feb.-Mar. 1999


Reference Librarian/Web Master Search Committee, member, Apr.-Aug. 1998

HSCL Travel Committee, member, Feb. 1998-Aug. 2001

Collection Management Advisory Committee, member, Jan. 1998-Aug. 2001

Library Liaison Program Work Group, member, Jan.-June 1998

User Education Task Force, chair, Jan.-May 1997

Strategic Planning Steering Committee, member/recorder, Sept.1996-July 1997

Vertical File Collection Development Policy Committee, chair, July-Dec. 1996

Reference Librarian Search Committee, member, July-Dec. 1996

Senior Secretary Search Committee, member, Jan.-Mar. 1996
CONTINUING EDUCATION CLASSES/WORKSHOPS TAKEN:

“Statistical Concepts for Translational Researchers”, 3.5-hr class, American Medical Informatics Association Translational Bioinformatics/Clinical Research Informatics Joint Conference, San Francisco, CA, 7 Mar. 2011

“HIPAA and Privacy General Awareness”, every year since 2005

“Interactive Workshop on the UCSC Genome Browser and Galaxy Framework, Beginner Workshop”, 2-hr workshop, American Society of Human Genetics Annual Conference, Washington, D.C., 3 Nov. 2010

“Undergraduate Faculty Genetics Education Workshop”, 6.5-hr workshop, American Society of Human Genetics Annual Conference, Washington, D.C., 2 Nov. 2010

“Quality Customer Service”, 3-hr workshop, University of Florida HR Training, Gainesville, FL, 12 Oct. 2010

“Teaching Clinical Skills to Medical Librarians”, University of Florida, Gainesville, FL, 2 Sept., 14 Dec 2010 (4.0 MLA CE Credits)

“Supervisory Skills #5: Who’s Leading and Who’s Following”, 2-hr webinar, University of Florida, Gainesville, FL, 30 Aug. 2010

“Introduction to RedCap”, 1.5-hr class, University of Florida, Gainesville, FL 20 Aug. 2010

“Supervisory skills #4: learning the power of effective praise, coaching and counseling”, 2-hr webinar, University of Florida, Gainesville, FL, 26 July, 2010

“Combating plagiarism: partnering with faculty to eliminate academic crime”, 2-hr LYRASIS webinar, University of Florida, Gainesville, FL, 13 July, 2010

“Monitoring “Tweets” to Compete”, 1.5-hr class, Annual Conference of the Special Libraries Association, New Orleans, LA, 14 June 2010

“Clinical genomics: from bench to bedside.” Medical Library Association Annual Conference, Washington, D.C., 22 May 2010 (4.0 MLA CE Credits)

Also served as onsite peer reviewer for course.

“Effective survey design: ask the right questions, get the right answers.” Medical Library Association Annual Conference, Washington, D.C., 21 May 2010 (4.0 MLA CE Credits)

“The librarian as professional, or how I learned to stop worrying and love complexity.” Medical Library Association Annual Conference, Washington, D.C., 21 May 2010 (4.0 MLA CE Credits)
“Now’s the Time”, MLA telecast on electronic patient records and the library, 2-hr telecast, University of Florida, Gainesville, FL, 24 March, 2010

“T and P Series – Mid career review”, 1.5-hr, University of Florida, Gainesville, FL, 27 Oct., 2009


“Coaching and mentorship for performance.” Medical Library Association Annual Conference, Honolulu, HI, 16 May 2009 (4.0 MLA CE Credits)

“Library director: knowledge, skills, and career path.” Medical Library Association Annual Conference, Honolulu, HI, 16 May 2009 (4.0 MLA CE Credits)

Also served as onsite peer reviewer for course

“Technology planning for health science librarians”. Florida Health Science Libraries Association Annual Conference, Gainesville, FL, 23 Apr. 2009 (6.0 MLA CE Credits)

“Free or low cost web 2.0 tools”. Gainesville, FL, 2 Apr. 2009 (4.0 MLA CE Credits)

“Ontologies in biomedicine.” American Medical Informatics Association Fall Symposium, Washington, D.C., 9 Nov. 2008

“Human-centered design and evaluation of health information systems.” American Medical Informatics Association Fall Symposium, Washington, D.C., 8 Nov. 2008

“Not-so dangerous liaisons: best practices for library liaison work.” Medical Library Association Annual Conference, Chicago, IL, 21 May 2008 (4 MLA contact hrs)

“Measuring your impact: using evaluation for library advocacy.” Medical Library Association Annual Conference, Chicago, IL, 16 May 2008 (6 MLA contact hrs)

“NCBI’s Advanced Workshop for Bioinformatics Information Specialists (NAWBIS)”. 40-hr course attended each August 2002-2007; taught the “Phylogenetics” module and attended the other 30+ hours of the course, National Center for Biotechnology Information, Bethesda, MD

“SLA Tech Zone: 10 essentials of web design.” Special Libraries Association Annual Conference, Toronto, ON, 8 June 2005

“Creating a knowledge sharing culture.” Special Libraries Association Annual Conference, Toronto, ON, 4 June 2005

“Grant writing.” Medical Library Association Annual Conference, San Antonio, TX, 14 May 2005 (4 MLA contact hrs)
“SLA Tech Zone: multimedia the easy way.” Special Libraries Association Annual Conference, Nashville, TN, 9 June 2004

“Meeting the information requirements of the Animal Welfare Act.” US Department of Agriculture, Animal Welfare Information Center, College Park, MD, 27 May 2004

“Chemistry librarianship for the non-chemist.” Special Libraries Association Annual Conference, New York, NY, 8 June 2003

“Digging in – hands-on experience with NCBI’s molecular databases.” Medical Library Association Annual Conference, San Diego, CA, 3 May 2003 (8 MLA contact hrs)

“Basic immunology for biological information specialists.” Special Libraries Association Annual Conference, Los Angeles, CA, 9 June 2002 (4 MLA contact hrs)

“Clustering genes by RNA expression: how to get started and where to go next.” American Medical Informatics Association Fall Symposium, Washington, D.C., 4 Nov. 2001

“Introduction to bioinformatics.” American Medical Informatics Association Fall Symposium, Washington, D.C., 3 Nov. 2001

“Drug discovery and the convergence of biology, informatics and information science.” Special Libraries Association Annual Conference, San Antonio, TX, 10 June 2001

“Evaluating student MEDLINE searches: how well do they search?” Medical Library Association Annual Conference, Orlando, FL, 26 May 2001 (4 MLA contact hrs)

“Introduction to bioethics and bioethics resources.” Medical Library Association Annual Conference, Vancouver, BC, 5 May 2000 (4 MLA contact hrs)

"Online resources in alternative medicine." Special Libraries Association Annual Conference, Minneapolis, MN, 10 June 1999

“Toxicology web resources at the NLM and beyond.” Medical Library Association Annual Conference, Chicago, IL, 15 May 1999 (4 MLA contact hrs)

“Evidence-based health care in action.” Medical Library Association Teleconference, Gainesville, FL, 23 Mar. 1999 (1.5 MLA contact hrs)

"Molecular biology information resources." Special Libraries Association Annual Conference, Indianapolis, IN, 6 June 1998

“Focus group interviewing.” Medical Library Association Annual Conference, Philadelphia, PA, 22 May 1998 (8 MLA contact hrs)

“Making the transition: converting to PubMed and Internet Grateful Med to search NLM’s databases.” Gainesville, FL, 1 May 1998 (7 MLA contact hrs)


"Outsourcing." Special Libraries Association Annual Conference, Seattle, WA, 8 June 1997

MLA Symposium: “Leadership roles for librarians in the new learning and information environments: advancing the educational perspective in health sciences libraries." Medical Library Association Annual Conference, Seattle, WA, 29 May 1997 (8 MLA contact hrs)


"Molecular biology for the non-molecular biologist.” Special Libraries Association Annual Conference, Boston, MA, 8 June 1996


WORKING SITE VISITS TO OTHER LIBRARIES AND INFORMATION INSTITUTIONS:

National Center for Biotechnology Information and National Library of Medicine, Bethesda, MD, 21 July 1999

University of Washington, Health Science Library and Information Center, Seattle, WA, 13 Mar. 1997

Oregon Health Sciences University, Library and BICC, Portland, OR, 12 Mar. 1997

August 25, 2011

J. Dale Prince
Executive Director
NN/LM SE/A

Dear Mr. Prince

I am writing this letter in support of the University of Florida Health Science Center Library’s “CTSA Infrastructure Pilot Project” proposal. As the Director of the Clinical and Translational Science Institute and the PI of the NIH Clinical and Translational Science Award (CTSA) I strongly support this application. As UF’s Clinical and Translational Science Institute matures and moves closer toward the renewal phase, it will be essential that our library is prepared to meet the current information needs of our researchers, as well as be prepared to assist with the renewal process.

As proposed in their submission, funding would be used to train our HSCL librarians in assessing and documenting research impact, assisting with CTSA renewal, and assisting in the creation of systematic reviews. Furthermore, funding would facilitate an information needs assessment of the diverse membership of the Institute, paving the way for future library services. The goals of enhancing the library’s bioinformatics support capabilities and developing resources for data management are timely and relevant.

In summary, I strongly support the HSC Library’s “CTSA Infrastructure Pilot Project” proposal and look forward to developing this critical partnership.

Sincerely yours,

David R. Nelson, M.D.
Professor of Medicine
Director, Clinical and Translational Science Institute
Partnership Agreement (Janis Glover, Yale University)

Dear Janis-

Thank you for the great news. We will keep you informed as the grant process progresses. The group will be capped at 15 and we'll be more than happy to pay for the MLA application for CE credit.

We're very much looking forward to hosting you in Gainesville.

Cecilia

-----Original Message-----
From: Glover, Janis [mailto:janis.glover@yale.edu]
Sent: Wednesday, August 24, 2011 1:46 PM
To: Botero,Cecilia; jan.glover@yale.edu; karen.odato@dartmouth.edu
Cc: Tennant,Michele R
Subject: Re: Visit the University of Florida?

Hello Cecilia,

Thanks so much for thinking of our course as part of your educational program. Karen and I would be delighted to take part, if your grant is funded.

Our class "Searching in Support of Systematic Reviews" is a four hour course and is an accredited MLA CE course (4 credits). We normally like to keep attendance for this course to 12 to 15 participants. Do you anticipate more than 15 attendees?

Also, we have been considering an 'advanced' course and this gives us an opportunity to put some of our ideas into an actual workshop format. Right now, this follow-up class will be a hands-on computer class (unlike the Searching in Support) focusing on advanced searching techniques and the application of those techniques to a real world example. We would also have a peer-review component. This may change, though, over time. Would you want this follow-up course to have MLA CE credit? Would there be money to help us pay for the application for MLA CE credit?

Neither one of us want an honorarium. We understand that we would need to do the session before April 30, 2012. Just so you know, though, we are talking with the Colorado Council of Medical Librarians about doing our class for them in March of 2012 but do not have confirmed dates yet.

Please contact either one of us if you have more questions.

Thanks for giving us this opportunity!

--Jan
Dear Jan and Karen,

The University of Florida was awarded a CTSA in 2009, and we are continuing to explore how to better serve our clinical and translational researchers and beginning to think about the library's role in the renewal process. As such, we are applying for an NN/LM SE/A grant to support our CTSI information infrastructure.

As part of the proposal, we are requesting funding for a variety of educational experiences for our librarians. We are very interested in having our librarians at our Gainesville and Jacksonville campuses trained to perform systematic reviews, and are also interesting in exploring the feasibility of running a formal systematic review service.

If we are funded, we would very much like to host the two of you for two days to teach your popular class "Searching in Support of Systematic Reviews", as well as a more advanced follow-up course to our librarians and the librarians in our region. Would you be interested in doing so if our grant is funded? If our application is successful, we will cover your travel and lodging expenses, and will be able to offer an honorarium. The visit would need to occur prior to April 30, as that is the end date for the funding.

If you are willing and able, please let me know via email by Friday, August 26. And please let me know what sort of honorarium you would require. if you would like to discuss the matter, please give me a call at 352-328-4743.

Thanks so much for your consideration,

Sincerely,
Cecilia Botero
Associate Dean of the George A. Smathers Libraries and Director of the Health Science Center Libraries
University of Florida
Health Science Center Libraries
PO Box 100206
Gainesville, Fla. 32610-0206
Tel.: (352) 273-8400
Fax: (352) 392-2565
Cecilia,

It would be a pleasure to host your group for a few days – no payment required. When you hear about your funding we can work out the specifics of the scheduling.

Paul

Paul Schoening
Associate Dean for Academic Information Management | Director, Bernard Becker Medical Library
Washington University School of Medicine | 660 S. Euclid Ave., Campus Box 8132 | St. Louis, MO 63110
Voice: (314) 362-3119 | FAX: (314) 747-4416 | Email: paul.schoening@wustl.edu

Dear Paul,

The University of Florida was awarded a CTSA in 2009, and we are continuing to explore how to better serve our clinical and translational researchers and beginning to think about the library’s role in the renewal process. As such, we are applying for an NN/LM SE/A grant to support our CTSI information infrastructure.

As part of the proposal, we are requesting funding for a variety of educational experiences for our librarians. Based on the materials presented by Kristi Holmes on her visit to UF in March, it is clear that
your library is at the forefront of assessing and documenting research impact and is heavily involved in tracking and evaluation efforts in support of your ICTS.

Would it be possible for me and four of my librarians (Jennifer Lyon, Michele Tennant, and two additional reference librarians) to spend three days at your library learning more about these topics? I would also be very interested in meeting with you to discuss strategies that you have employed as Director to integrate your library into the ICTS.

Please let me know if you are willing to host us at your library. If our award application is successful, we would need to visit sometime before the end of April 2012, as that is when the funding ends. And if you are willing to host us, please let me know if you require funding to cover the costs of the time your staff spends with us, and how much that would be so that we can write it into the grant.

If possible, please respond by Thursday, August 25, as this particular grant has a very short turnaround time from announcement to submission deadline. I apologize for the short notice.

Thank you for your consideration, and please feel free to contact me if you have any questions.

Sincerely,

Cecilia Botero

Associate Dean of the George A. Smathers Libraries and

Director of the Health Science Center Libraries

University of Florida Health Science Center Libraries

PO Box 100206 Gainesville, Fla. 32610-0206

Tel.: (352) 273-8400

Fax: (352) 392-2565
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| Travel to Bernard Becker Memorial Library, Washington University | Airfare for (5) librarians, roundtrip @ $450/each- Jacksonville FL to St. Louis, MO | 2,250 |
| Travel to Health Science Center Library, University of Florida | Airfare (roundtrip) for Karen Odato, Systematic Review Trainer- Lebanon NH to Gainesville FL | 751 |
| Travel to Health Science Center Library, University of Florida | Airfare (roundtrip) for Janice Glover, Systematic Review Trainer- Hanover, CT to Gainesville FL | 532 |

| Travel to Bernard Becker Memorial Library, Washington University | Lodging | 1,800 |
| Travel to Health Science Center Library, University of Florida | Lodging | 390 |
| Travel to Health Science Center Library, University of Florida | Meals   | 144 |

| **TOTAL** | | 5,040 |

| Travel to Health Science Center Library, University of Florida | Airfare (roundtrip) for Karen Odato, Systematic Review Trainer- Lebanon NH to Gainesville FL | 751 |
| Travel to Health Science Center Library, University of Florida | Airfare (roundtrip) for Janice Glover, Systematic Review Trainer- Hanover, CT to Gainesville FL | 532 |
| Travel to Health Science Center Library, University of Florida | Airfare (roundtrip) for Karen Odato, Systematic Review Trainer- Lebanon NH to Gainesville FL | 751 |

| Travel to Bernard Becker Memorial Library, Washington University | Lodging | 50 |
| Travel to Health Science Center Library, University of Florida | Lodging | 390 |
| Travel to Health Science Center Library, University of Florida | Meals   | 144 |

| **TOTAL** | | 1,116 |

| **TOTAL TRAVEL** | | $ 7,491 |

| Medical Library Assoc fee for approval of new course | | $ 125 |

| **TOTAL OTHER EXPENSE** | | $ 125 |

| **TOTAL DIRECT COSTS** | | $ 18,182 |
| **TOTAL INDIRECT COSTS (10%)** | | $ 1,818 |

| **TOTAL PROJECT EXPENSE** | | $ 20,000 |
August 29, 2011

Mr. Dale Prince  
Executive Director  
National Network of Libraries of Medicine  
Southeastern/Atlantic Region  
University of Maryland Baltimore  
Health Sciences and Human Services Library  
601 W. Lombard Street  
Baltimore, MD 21201

Dear Mr. Prince,

Please accept this letter of approval for the University of Florida Libraries – Health Science Center Library proposal: **Developing an infrastructure for information support for clinical and translational researchers.**

This letter confirms the proposal and budget for $20,000 during the grant period: October 1, 2011 through April 30, 2012, have been reviewed and approved.

Sincerely,

Judith C. Russell  
Dean of University Libraries