

PROJECT TITLE: Building Research Capability among Academic Librarians (IRDL-2)

ABSTRACT

Loyola Marymount University (LMU) seeks funding from the Laura Bush 21st Century Librarians Continuing Education program to extend and improve our successful project to connect research and practice among librarians, the Institute for Research Design in Librarianship (IRDL) – IRDL-2. During the proposed three-year grant period (October 2016 to September 2019), LMU's William H. Hannon Library, partnering with the San José State University School of Information and the Statewide California Electronic Library Consortium (SCELC), will provide 60 novice academic and research librarian researchers with instruction in research methods and a full year of support to complete a project. Funded for three years by IMLS in 2013, IRDL (<http://irdlonline.org>) is a continuing education opportunity for academic and research librarians to expand their research skills and increase their output, focused on completing a specific research project of their own design. IRDL-2 is aligned with the IMLS Agency-level goal of placing the learner at the center; its design responds directly to the stated needs of working post-MLS/MLIS academic and research librarians.¹ It addresses all five factors that have been shown to have the most positive effect on research productivity: education and experience, professional commitment to research, mentoring, and time.²

We are creating an engaging continuing education experience, the centerpiece of which is a summer research workshop hosted by LMU. Two experienced social sciences researchers/instructors will teach the librarian Scholars the fundamentals of research design and foster a collegial atmosphere in which they have the opportunity to revise a research proposal of their own design. After completing an intensive series of in-class exercises and hands-on writing sessions, Institute Scholars will leave ready to conduct a research study at their home libraries. Once the Scholars have returned to their home institutions, the Institute will provide them with ongoing support, using both informal peer-mentoring and a formal mentor program, to aid them as they conduct their research and prepare to share their research findings with professional and scholarly communities. They will establish a personal learning network, aimed at providing ongoing support even after their year of participation as an institute scholar ends, providing them with the mentoring and motivation they need to be successful researchers and encourage other information professionals to engage in research.

The purpose of the project is to create a cost-effective, sustainable model for academic and research librarians to become skilled researchers, capable of mentoring and collaborating with one another in their investigative work. During these three years of grant funding the IRDL-2 will:

- Deliver instruction in areas needed to complete the research design for projects proposed by the Scholars.
- Create a workshop environment in which Institute Scholars hone their draft research proposals.
- Foster an environment of collegiality and support in the research process.
- Facilitate the dissemination of research results through publication or presentation.

In these three years we plan to examine how IRDL is designed, with an expectation of sustainability at the end of this grant period. During IRDL-2, we will turn our focus to three new evaluative components: 1) determining the appropriate length for the summer workshop, while still covering essential content and establishing the research network; 2) creating a formal mentor component to effectively support the Scholars when they return to their home institutions after the workshop; and 3) measuring the research productivity of the Scholars. We believe that we have created an effective immersive, continuing education program that aids and supports novice librarian researchers in their goal to conduct valid and reliable action research and to disseminate the results. Our focus now is to formalize those components into a sustainable, cost-effective experience. In collaboration with our diverse Advisory Board we will identify possible partners and explore options for a fee-based version of IRDL to be implemented following the grant period.

¹ Kennedy & Brancolini, 2012.

² Hoffman, Berg, & Koufogiannakis, 2014

Loyola Marymount University (LMU) seeks funding from the Laura Bush 21st Century Librarians Continuing Education program for **Building Research Capability among Academic Librarians (IRDL-2)** to extend and improve our successful project to connect research and practice among librarians, the Institute for Research Design in Librarianship (IRDL). Funded for three years by IMLS in 2013, IRDL is a continuing education opportunity for academic and research librarians to expand their research skills and increase their output, focused on completing a specific research project. IRDL is aligned with the IMLS Agency-level goal, *Learning*, by placing the learner at the center; its design responds directly to the stated needs of working post-MLS/MLIS academic and research librarians.¹ We are creating an engaging continuing education experience, the centerpiece of which is a summer research workshop hosted by LMU. In the first three years the 68 Scholars selected (from 244 applications) were from university (51) and college (4) libraries, 3 research institutions, and 2 community colleges, representing 29 states. The Scholars arrive with a draft research proposal, which they revise throughout a curriculum of social science methods training focused on the applied LIS domain. IRDL addresses the LB21 funding priority *Learning in libraries*, by constructing and administering a program to meaningfully connect research and practice; this project is concerned with lifelong learning and developing communities of practice among librarians. We have met our goals with regard to diverse librarian participation in the first three cohorts. We have also made substantial progress in improving IRDL effectiveness and logistics. We believe that with three more years of funding we will reach our long-range goal of designing a complete model for IRDL, so that the demand for a continuing education program like this can have a lasting, sustainable impact on the profession.

During these three years of grant funding we plan to offer the Institute, while examining how it is designed. We will continue existing assessments and in addition turn our focus to three new evaluative components: 1) determining the appropriate length for the summer workshop, while still covering essential content and establishing the research network; 2) creating a formal mentor component to effectively support the Scholars when they return to their home institutions after the workshop; and 3) measuring the research productivity of the Scholars. We have created an effective immersive, continuing education program that aids and supports novice librarian researchers in their goal to conduct valid and reliable action research and to disseminate the results. Our goal now is to formalize those components into a sustainable, cost-effective experience.

1. Statement of Need

This project builds on more than two decades of scholarship surrounding the importance of academic librarian research. For the purpose of this project we are defining research broadly to include theoretical research, designed to advance knowledge in the field of library and information science, often conducted by “academic researchers;” and operations research, designed to inform decision making, often conducted by “practitioner-researchers.”² Academic and research librarians and their institutions derive well-established benefits from librarians conducting research: progress toward gaining promotion, tenure, and higher salaries; advancement in the profession and recognition; receptivity to change; increased skill in managing complex library operations through systematic study; and better service to and empathy with faculty researchers.³ However, the reasons why a librarian may not conduct research can be attributed to a variety of causes, many of which have been tested in the literature: reported lack of time to complete a research project, unfamiliarity with the research process, lack of support for research (both moral and monetary), lack of access to research, lack of confidence, discouraging jargon, inadequate education in research methods, and lack of motivation.⁴

IRDL is designed to bring together a diverse group of academic and research librarians who are motivated and enthusiastic about conducting research but need additional training and/or other support to perform the steps successfully. The centerpiece of IRDL is a workshop held annually in the summer, during which participants receive expert instruction on research design and small-group and one-on-one assistance in writing and/or revising their own draft research proposal. In the following academic year, participants receive ongoing mentorship in conducting their research and preparing the results for dissemination. The workshop curriculum is collaboratively developed by the project directors and instructors, with input from an Advisory Board (Please see attached supporting documents

for the Course Outline and List of Project Staff). Our grant partner, SCELC, comprised of 110 academic and research libraries in California, Texas and Nevada, will also annually sponsor a Research Day held on the LMU campus in the spring in order to gather input about current research concerns, which may influence the content of the IRDL workshop curriculum, and to provide training focused on both qualitative and quantitative methods.

The Institute assists librarians to develop the skills necessary to complete a research project of their design, as well as prompts participants to construct a personal network of possible collaborators for future research projects. Each year's 20 participants will learn from Institute instructors and one another, revising their project proposals during the workshop. Participants will be expected to conduct their studies during the coming academic year, in consultation with their mentors, and share their progress with the project directors in monthly check-in sessions. Over the course of the three-year grant, Scholars from new cohorts will be incorporated into the wider community of researchers, encouraged and supported in providing informal mentorship to one another and to advise the Institute team on improving the experience for subsequent cohorts. All 60 participants will be included in the summative evaluation of the Institute and its attendant activities in order to make final recommendations on a sustainable model for the future.

1.1. Related Research and Similar Projects

Many academic and research librarians become practitioner-researchers, defined as professionals who “approach projects and problems in ways that yield (1) solutions, (2) an enlarged understanding of their actual field of work—their *practice*—, and (3) improvements in practice.”⁵ The reasons for academic and librarians to conduct research are varied and well-argued: “It can promote strong relationships with teaching faculty, enhance beneficial comprehension of the research process, and facilitate concrete understanding of the access and service needs of the library clientele”⁶; “[c]onducting research can contribute to career advancement for librarians, especially academic librarians on tenure track”⁷; “[l]ooking analytically at librarianship through research fosters growth, curiosity, awareness and promotes new learning”⁸; and “[e]ffective interaction between research and practice will produce a strong theoretical framework within which a practitioner community can develop and thrive,”⁹ to cite only four examples. Accreditation bodies require that academic institutions engage in evidence-based decision making. Thus, it has become more important for libraries to study their own operations in a systematic and reliable manner. Practicing academic librarians report gaps in their knowledge regarding the research process, even at institutions with demanding standards of research expectations.¹⁰

The authors of this grant proposal administered a national survey in 2010, targeting academic librarians, to explore these gaps. The survey asked these librarians to describe their own research design backgrounds, rate their own confidence levels in performing the discrete tasks of a research project, and report on institutional support for research. The survey was launched in early December 2010 via distribution lists and gathered over 900 responses. The results show uneven training in research design, varied levels of confidence in the steps of the research process, and mixed support for conducting research at their institutions. Responding to these findings, the authors developed the Institute for Research Design in Librarianship (IRDL), which supports those three areas of need. The results of the survey are summarized in an article published in *College & Research Libraries*.¹¹ The authors administered an updated survey in December 2015 to determine if there had been any change in findings in the intervening five years, and the results of that survey are currently being evaluated. Both surveys included a series research confidence questions, which has been used to design and revise the IRDL curriculum.

Librarians in a 2012 survey identified workshops as their most preferred way to acquire additional knowledge of the research process.¹² However, few training opportunities have been identified that address research design from a holistic point of view. Crumley describes a 2001 conference on Evidence-Based Librarianship, and Booth notes a week long workshop on Teaching Evidence-Based Practice.¹³ The Canadian Association of Research Libraries (CARL) offered its first Librarians Research Institute in June 2012; it includes some elements of IRDL, however, it is designed for experienced researchers rather than the novice.¹⁴ Elkin comments that “One-off, one-day courses

can be seen to be of limited value, unless part of a coherent and cohesively planned framework for development.”¹⁵ A disadvantage of these short courses that our project will address is the lack of ongoing communication among participants after the instruction has ended. Authors Booth & Brice and Robbins noted that a weakness in their own workshop plans was a lack of post-workshop communication.¹⁶

Librarians may have access to formal social science research methods courses through face-to-face instruction in their own communities (if they live near a library school), online courses, and hybrid courses. However, these courses offer only one component of our program: instruction. Research has shown that instruction alone may not be sufficient for librarians to complete research and disseminate their results. Our program offers instruction plus four additional components: mentorship, ongoing advice and support during the time of the research project, modest financial support, and the opportunity to become part of a research community of practice.

Models similar to IRDL have been employed by a number of other institutes for working professionals. These institutes have proven their success and participants recognize the value of the experience. These institutes range one to two weeks in length and examples include the ACRL Immersion program for information literacy,¹⁷ the Leading Change Institute,¹⁸ and the Minnesota Institute for Early Career Librarians from Traditionally Underrepresented Groups.¹⁹

1.2. Intended Audience

This project focuses on academic and research librarians because most are expected to conduct and disseminate the results of research, yet many are challenged by this expectation. In addition to academic librarians, we are targeting research librarians who work in special libraries, such as hospitals, research institutes, and museums; through our partnership with SCCLC, which includes many of these libraries, we know that their librarians face similar research challenges. Our intended audience is librarians who are novice researchers, defined as those who may have conducted research but have not yet had a single- or lead-author article published or a presentation accepted by a peer-reviewed publication or conference. Participants apply to IRDL with a draft research proposal; our goal is to send each librarian home with a project ready to begin. The research project could be institutional operations or assessment research, cited by Perkins & Slowik as increasingly important to academic library administrators; or it could be theoretical research.²⁰ In writing about the academic library research agenda, James Neal emphasized the need for academic librarians to pursue research that advances knowledge at the individual, organization, professional, and national levels; IRDL supports research at each of those levels.²¹

Stephenson’s 1987 article notes that, “Commitment [to research] requires an enthusiasm, if not an actual passion.”²² This Institute is created to address the needs of those academic librarians who have the passion for social science research but do not possess the complete skill set to perform it on their own. The curriculum is designed around the steps of a typical research project and gives special focus to those areas about which academic and research librarians have identified themselves as not feeling confident; the design of IRDL puts the learner at the center of this experience from the design of the curriculum to the social support throughout their research project.

The workshop will be led by two main instructors: the lead instructor is a social scientist who specializes in conducting focused research design courses for working professionals; the co-instructor is a library school faculty member who teaches research methods. She has also worked as an academic librarian. These two individuals will lead a select cohort of Scholars in a series of hands-on exercises and targeted writing sessions to fully develop a research project over the course of seven days. During the course of the workshop, Scholars will revise and refine their proposals in collaboration with the main instructors and their Institute colleagues, with the goal of having a well-constructed research project to conduct when they return to their home institutions. Upon their return home each Scholar will be paired with a mentor, with whom he/she will meet on a regular schedule (via online mechanism, phone, or email) to receive advice and support throughout the upcoming year. Mentorship has been

identified as a significant factor in research productivity among novice researchers outside LIS, but has not been extensively employed in our field.²³

Each cohort will be chosen from a selective submission process, with an emphasis on enthusiasm for research and diversity from a variety of perspectives – geographic distribution, ethnicity, age, type and size of academic library, and work area within the library. We are especially eager to recruit ethnically diverse librarians who are younger and may work in smaller libraries, where it may be more difficult to create a community of researchers who share their interests. This dilemma has been documented in a recent survey of librarians of color by Damasco & Hodges.²⁴ Requirements for participation are clearly outlined on the Institute website and application materials (Please see attached supporting documents for the Application Materials).

1.3. Assessing and Meeting Audience Needs

The psychological literature suggests that self-efficacy might be an important factor in encouraging academic librarians to undertake research. Bandura asserts that beliefs about self-efficacy can be developed by four main sources of influence: mastery experiences, vicarious experiences, social persuasion, and somatic and emotional states.²⁵ In response to the stated needs of academic librarians, and in acknowledgement of this literature, we have designed the Institute to provide both mastery experiences and social persuasion. Mastery experiences build confidence through success and provide an individual with the ability to persevere in the face of obstacles, which is especially important in performing difficult tasks. Social persuasion consists of structuring situations in which an individual receives encouragement and experiences success in working through challenges.

This project creates an Institute that strengthens research skills and provides support with the following:

- foster an environment of collegiality and support in the research process;
- provide instruction in areas needed to complete the research design for a project identified by an Institute Scholar;
- encourage the dissemination of research through publication or presentation by outlining the process for publishing or presenting research results; and
- instill confidence in Institute Scholars about the research process by providing clear instruction on how to perform all of the steps in a research project.

There is strong support in the literature for librarians to pursue conducting research. An example is provided by Crumley and Koufogiannakis: “If [librarians] are encouraged to pursue research opportunities, not only will this enhance the literature base, but it will also allow librarians to conduct those studies best suited to their environment and time availability.”²⁶

2. Impact

The design of IRDL-2 is aligned with the results of a recent content analysis of 42 empirical studies that explored the direct relationship between at least one success factor and increased research productivity among librarians and other professionals.²⁷ All of the five factors that were shown to have the most positive effect on research productivity are evident in the design of both IRDL and IRDL-2: education and experience, professional commitment to research, mentoring, time, and access to and use of resources (Please see attached supporting documents for a Chart of Success Factors, mapped to IRDL design components). The response to the call for participation in IRDL in the first three years – 244 applicants for 68 spaces – confirms our belief that there is no continuing education mechanism in place to assist librarians in gaining experience in designing and planning a research project, then gathering and analyzing data. O’Connor and Park, though, suggest that there is an urgency to train librarians in research: “Our field needs to educate a large number of producers of research if we are to maintain a stable infrastructure for our research base.”²⁸ This project has the potential for major national impact by increasing that number of producers of research who are also energized to participate in a community of like-

*See Supporting Documents for endnotes and references.

mindful professionals.

2.1. Impact on Skills and Abilities in the Library Workforce

The primary performance goals of IRDL are to train and develop library professionals and assist in the development of their communities of practice. We have planned a curriculum that will lead to the following learning outcomes for each group of Institute participants. After completing the Institute, Scholars will be able to:

- competently complete a social science research project;
- effectively communicate the results of research through a peer-reviewed publication or presentation; and
- identify partners for future research and peer advisors at the librarians' home institutions or at other libraries.

Our performance measurements related to training will include 1) examining the research productivity of the Scholars (number of projects successfully launched and where disseminated); 2) observing collaborations in new research (research network development); and 3) quantifying, with the use of a scale, the confidence Scholars feel in their ability to conduct successful research. We have developed a Research Confidence Scale that our assessment team administers before and after the summer workshop, to examine how the Scholars' confidence in completing the discrete steps of a research project may change as a result of participating in IRDL. In the two years measured so far we have observed an increase in confidence in each step. We plan to continue the use of the scale in IRDL-2 to determine if the planned changes in the design of the curriculum are still positively affecting the confidence of the Scholars in completing their research.

In addition to measurements of confidence we have designed two evaluative components, in collaboration with our assessment team, to gauge the effectiveness of the curriculum and to determine if we are meeting our goal to provide impactful training in all areas of the research process. The first is a brief multiple-choice test with questions related to content presented in that component, with the same test administered before and after each component is taught. The second employs a rubric evaluation. After the summer workshop is completed we invite a group of regional librarians to measure the pre-workshop proposals of each Scholar (the ones submitted as part of their application) against the post-workshop proposals (the proposal that is revised throughout the workshop), to note any gain in mastery in the components (Please see attached supporting documents for the Rubric used in the proposal evaluation process).

Working collaboratively during the time of the Institute reinforces the learning goals and begins to create a community of practice. We are already seeing evidence that providing ongoing support for the year following the Institute is leading to relationships and a support network that persists after the workshop has ended (note the Scholar collaborations in posters and publications completed after IRDL at <http://irdlonline.org/project-info/irdl-Scholar-works-completed/>). We are using social network analysis to measure the size and strength of the research networks of each of the Scholars over the course of their IRDL year, to determine if their participation in IRDL has an effect on the evolution of their learning communities. We have so far observed compositional evidence of a small network at the outset being expanded throughout the year of participating in IRDL, including the anticipated "churn" (addition and loss of people in the networks) as the Scholars mature in their research agendas.²⁹

2.2. Results Benefit Multiple Institutions and Diverse Constituencies

In order to sustain the training gained at IRDL, we propose to introduce a formal mentorship component during this three-year grant, so that the Scholars are matched with an experienced peer-professional guide to assist during their research project. We anticipate having a group of ten practitioner-researcher mentors who are actively engaged in their own social science research activities, each paired with two Scholars. The mentors will be expected to check in with their mentees on a schedule throughout the year, to offer guidance, support, and encouragement. At the onset of this grant we plan to design the mentorship experience in collaboration with a few members of our Advisory Board, so that we may determine appropriate activities and measurements of diverse engagement and

*See Supporting Documents for endnotes and references.

success. To ensure that we are addressing mentorship sufficiently we plan to invite an expert in mentorship to join our Advisory Board. We anticipate activating the mentorship program within the first year of the grant.

2.3. Transformative Practice

We understand that assessing the long-term benefits will be an iterative activity, as we follow the Institute Scholars over time to see how their projects are completed and how they identify their successes. We have devised a communication plan for our Scholars to continue conversing with their Institute colleagues on a monthly basis; we view personal learning networks among librarian researchers as an essential component of their success. A 2014 Scholar commented, “IRDL not only set me on the path to producing and properly documenting original research, but it set me up with a network of like-minded Librarians who will help me achieve my goals.”

2.4. IRDL as a Continuing Education Model

The practical model of IRDL has proven attractive to librarians with interests similar to the project directors, who have engaged with us to act as external evaluators during the first two years of IRDL. As external evaluators two librarians came to IRDL, one per year and each for three days, to observe how the curriculum is enacted, and to view the engagement of the Scholars. The evaluators wrote summaries of their observations about IRDL as a model for continuing education for practicing librarians. The external evaluator in our first year of IRDL, Linda Hofschire, PhD, has gone on to lead the IMLS-supported program, Research Institute for Public Libraries.

3. Project Design

3.1. Project Goals

The long-range goal of this project is to increase the number of high-quality research projects conducted and results disseminated in the field of information and library science. We seek to create a pervasive culture of research and evidence among academic and research librarians and give them the tools and support to achieve their objectives. By providing a specialized curriculum for academic and research librarians that will permit them to competently complete the design of a research project, learn how to effectively communicate their findings, and begin to create their own networks of research partners, we expect to produce a diverse cohort of Scholars that will raise the expectations for practitioner research can be accomplished in the field. Evaluation of the project will be ongoing. A particular focus of the upcoming three years will be to examine the components that make up the workshop, to determine which are essential and how some may be moved to an online format instead of in-person. This examination will provide us guidance for sustainability of IRDL. In order to persuade participants and their libraries to pay for IRDL, we must demonstrate its effectiveness.

3.2. Project Activities

The central project activity will be to plan, offer, evaluate, and revise the Institute, with a focus on sustainability. All other activities will support the Institute and the work of the Scholars throughout the academic year, as they conduct their research projects, analyze the data, interpret the results, and disseminate their findings. The project is designed to support a cohort of 20 academic librarians each year in the completion of a research project – for a total of 60 in three years.

An important project activity is recruitment of participants. We will send a call for applicants to all of the distribution lists where we disseminated our 2010 and 2015 librarian research surveys. We will continue to actively solicit applicants via email forums such as ALA Black Caucus, ALA Asian/Pacific American Library Association, ALA Spectrum, REFORMA, ATALM, and other groups that attract librarians of color; our diverse Advisory Board has been crucial in effectively reaching this audience. Our intent in the first three years was to have 30% of each cohort from racially diverse backgrounds; we exceeded that goal and in this proposal we will strive for 40%.

During these three years the Institute for Research Design in Librarianship will:

- Deliver instruction in areas needed to complete the research design for projects proposed by the Scholars. Co-taught by practicing researchers, the Institute curriculum will be informed by the results of the 2010 and 2015 surveys and constructed in collaboration with the instructors.
- Create a workshop environment in which Institute Scholars hone their draft research proposals. The Scholars arrive to the summer workshop with a draft research proposal and leave with a project ready to start. We expect that the Scholars will increase their confidence levels by participating in a collegial learning atmosphere, while learning the specific steps needed to complete their research project.
- Foster an environment of collegiality and support in the research process. One possible barrier noted in the literature that may hinder a librarian from completing a research project is moral support. We aim to create an environment of collegiality, one in which the Scholars can learn and support each other throughout the year. The team will explore a range of tools to facilitate communication between Scholars, mentors, and instructors, and choose the ones that are most effective. Using these communication tools, participants will keep each other updated on their progress and share draft research proposals with instructors and with each other. Mentors will provide feedback and respond to questions or concerns, facilitating discussions regarding how to overcome challenges to completing research projects.
- Facilitate the dissemination of research results through publication or presentation. As part of the application process we will gain a commitment from the Scholars that they will attempt to complete their research project in the coming year and disseminate the results. During the workshop the Scholars will learn about the peer-review process for publications and conference presentations.

Depending on how the Scholars wish to communicate, we will develop a suite of both public and private communication mechanisms that will facilitate discussion among Institute Scholars before and after the workshop. The Scholars will be encouraged to post drafts of their proposals and related instruments, and questions that they would like to discuss with the Institute instructors and other participants. Throughout the academic year, participants will be asked to keep the other participants informed on their research project progress; we hope to develop a level of trust during the summer that will encourage honest sharing, including obstacles and setbacks as well as the achievement of milestones and successes.

3.3. Evaluation Plan

Project evaluation will be led by the Institute's assessment team, comprised of the Project Director/Co-Investigator, the Director of Assessment at LMU, and the Interim Director of Institutional Research at LMU. Evaluation will cover all aspects of the project, including the assessment of learning outcomes from the Institute, the overall effectiveness of the Institute, and the effectiveness of the researcher support mechanisms employed throughout the project (tools for communication and interaction throughout the academic year following the Institute).

Evaluation of the project will be ongoing. Formative evaluation will lead to changes in the Institute curriculum and our mechanisms to support Scholars throughout the project; the goal will be to gauge any adjustments as we proceed. After the completion of each year of the Institute training we plan to review the design of the Institute and make changes as we receive feedback from the Scholars and instructors. As a condition of participating in the fully-funded Institute, participants agree to contribute to the formative and summative project evaluations. Via surveys and focus groups, we will gather data from participants regarding their thoughts about the curriculum, what follow up support was helpful or lacking, what challenges they still face, and other issues. Specific plans for the evaluations will be formulated with the assessment team. We will conduct a summative evaluation at the end of Year 3, focused on the overall success of the project, looking at both short-term and long-term successes of Institute Scholars.

Our evaluation process and the results of our evaluations will be documented so that it can be shared to inform other Institutes that are developed based on our model. All reports will be posted on the project website and archived in our institutional repository, Digital Commons @ LMU.

4. Diversity Plan

The retention of academic librarians of color is a critical issue to our profession. Damasco & Hodges note that the librarians of color who responded to their 2009 survey on promotion and tenure cited the challenge of conducting research and writing for publication as a recurring theme. Participation in research and writing workshops was one of the most highly rated professional development activities.³⁰ We believe that IRDL-2 has the potential to increase the retention of these librarians by helping them achieve tenure and promotion, when it is available to them, and professional advancement and higher salaries when it is not. In IRDL 30% or more of each cohort was from racially diverse backgrounds; we will reserve 40% of the spots each year for minority librarians in IRDL-2. In addition, we will place special emphasis on selecting Scholars who propose research that explores diversity in library services, including services to underserved communities and minority librarianship. Our Advisory Board (members listed at <http://irdlonline.org/project-info/project-personnel/>) represents the diversity we plan to achieve in the IRDL. We believe that including librarians with a wide range of backgrounds and experience will allow us to explore the diverse types of challenges librarians face in conducting research in a variety of academic and research library settings.

5. Project Resources: Personnel, Time, Budget

5.1. Key Personnel

Marie Kennedy, Serials and Electronic Resources Librarian at LMU, will serve as project director and PI. She is actively involved in operational research, has published several articles about the daily work in libraries, and is currently working on a book manuscript (second edition) about the practical aspects of marketing electronic resources. She designed this grant proposal with her co-author as a direct response to the lack of opportunities for professional continuing education in research design, in order to provide other librarians with specific skills to perform effective operational research. She will provide regular oversight of the project activities and expenditures and will co-author all project reports.

Kristine Brancolini, Dean of the Library at LMU, will co-direct the project, serving as co-investigator. Dean Brancolini successfully directed a number of grant-funded projects while Director of the Digital Library Program at Indiana University Bloomington. She has published and presented her research in numerous venues and mentored many librarian researchers over the years. Dean Brancolini will provide assistance in oversight of all project activities and expenditures, and co-author all project reports.

Greg Guest, Instructor, is a consultant and owner of Social Research Solutions. He has successfully directed numerous grant-funded projects and collaborations as well as providing methodological training and consultation for major organizations, including the Centers for Disease Control and Prevention, the U.S. Army, and the Federal Reserve Bank. He has published widely about research design, most notably as co-author of a monograph titled, *Qualitative Research Methods: A Data Collector's Field Guide*. He will guide the Scholars through the seven-day Institute in collaboration with Lili Luo. He has collaborated on the design of the original curriculum and will participate in its revision for this three-year project.

Lili Luo, Instructor, will be responsible for developing, assessing, and refining Institute curriculum. Dr. Luo is an Assistant Professor with the San Jose State University School of Information. She teaches courses in reference and information services, as well as the School's required courses in research methods. Luo is an active researcher in the areas of virtual reference services, online learning, and the role of research methods education. In addition, she brings to the team her in-depth knowledge regarding online learning. She will help the Institute team identify approaches to consider delivering Institute curriculum virtually. Luo will also share project findings, especially with other educators and the scholarly community.

Rick Burke, Executive Director of the Statewide California Electronic Library Consortium (SCELC), leads one of the most successful library consortia in the country, focused on licensing content and continuing education. He will

assist in recruiting Institute participants from member libraries, particularly special libraries like museums, nonprofit research organizations, and hospital libraries. He will provide input into the continued development of the Institute and coordinate Research Day each year.

Laura Massa, Director of Assessment at LMU, will lead the assessment and evaluation activities of the project. Dr. Massa has experience as both a researcher and assistant professor in Cognitive Psychology, specializing in assessment and improving student learning outcomes. Dr. Massa holds a Ph.D. in Cognitive Psychology. She has guided the development and implementation of a university assessment plan, conducts educational workshops on assessment topics, and provides advice and support to academic departments in the development and maintenance of effective assessment activities.

Christine Chavez, Associate Director of Survey Research at LMU, will take responsibility for surveys and evaluation activities on the project. She has experience with several survey research projects. At LMU Ms. Chavez oversees the administration of national student and faculty surveys on campus, conducts educational workshops on survey topics, provides support and guidance to faculty and staff in developing surveys, and provides leadership in the development and administration of methods for evaluating teaching effectiveness.

5.2. Budget

The IMLS-funded portion of the budget (\$403,950) will be used to pay for the following project-related expenses over the three years: travel and subsistence costs for nine days for 20 Institute Scholars each year for three years; travel expenses and subsistence costs for nine days and fees for the instructors who will conduct the Institute, reconfigure the curriculum, and facilitate ongoing learning experiences; and stipends for the Advisory Board and mentors who will serve as Institute resources. All other expenses (estimated to be \$411,240) will be covered by LMU cost share.

6. Communications Plan

Our communication plan is multi-faceted, and includes traditional mechanisms of presentations, published articles, and discussion in person and via Web-enabled mechanisms. We have created a project website and blog at <http://irdlonline.org>, where we post information about the Institute. The website functions as the primary communication medium with potential applicants in all three years. Once Institute Scholars have been selected, we post a profile of each one on the project blog. The website will be archived as a record of the project, along with all course activities; we archive twitter conversations from each year's workshop and link to them at <http://irdlonline.org/about/previous-Institutes/>.

The project directors will share the results of the project at national and international conferences, and in the library literature (view completed works for the current grant at <http://irdlonline.org/publications/>). We will encourage Institute Scholars to reflect and write about their experiences participating in the Institute. A recent example of this already in action is the panel by IRDL Scholars about their research experiences post-workshop, at the 2016 SCEL Research Day: <https://scelcpz2016.sched.org/event/6I2c>. We plan to gather data about the research networks of the Institute Scholars so that we may begin to understand the evolution of their personal learning networks as a result of participation in the Institute; we will share the summaries of the networks publicly. These activities will publicize the Institute and build an audience for future Institutes. We will emphasize in all communication that we are seeking a sustainable model for academic librarians to learn about doing research and support one another in conducting research and disseminating the results. Thus, participating at conferences and actively seeking other opportunities for face-to-face discussion will be important for the success of the project.

At the conclusion of the project, the project directors will analyze the evaluative data and publish the project results in the library literature. We also plan to offer conference panel discussions with the directors, instructors, and Institute Scholars discussing the Institute and the other support mechanisms we will have put in place to support

the work of academic librarian researchers. The goal will be to share project successes and failures in order to create a sustainable model.

7. Sustainability

The three-year project to further develop the Institute for Research Design in Librarianship will focus on sustainability beginning in the first year and continuing for the duration of the project, anticipating developing a business model to continue the Institute and its attendant support activities without grant funding. The project directors will explore a variety of business models, including working with a school of library and information science, a consortium, or a professional association. The project partners believe that a research institute with well-documented success in advancing the research goals of academic and research librarians could establish a fee-based funding model. We have prepared a report of sustainability options for our Advisory Board to consider (Please see attached supporting documents for the Sustainability Report) and will seek their guidance on which we may want to pursue. As we move forward with possible future partnerships for IRDL we will endeavor to see four principles upheld. Future iterations of IRDL should have the following five elements: 1) a learning component; 2) a practice component (a real project to complete); 3) affordable to institutions; 4) focus on novice researchers; and 5) commitment to the diversity of participants.

A major evaluative component of this project will be to determine the appropriate length for the summer workshop. The exit surveys of the participants from cohorts 1 and 2 of IRDL found that 76% of the Scholars rated the level of difficulty of being away from their home libraries for 12 days as neutral/easy/very easy; however, in IRDL-2 we will experiment with reducing the number of in-person workshop days in a cost-efficiency/sustainability effort. We propose to reconfigure the workshop so that it can be completed in one week (arrive to LMU on Saturday, begin on Sunday and end next Saturday night, returning home on Sunday). Given that we are looking to eventually propose IRDL as a fee-based program, reducing the number of on-site days for the workshop is a reasonable solution.

The revision of the curriculum will be addressed at the onset of this grant, in collaboration with the two instructors, to ensure that the critical components of a research project may still be completed within the reduced time frame. We anticipate that our partner, SJSU, will be able to guide us in developing some aspects of the program to be completed online, to support our efforts to reduce the time of the on-site programming. The copyright of the revised curriculum will initially be retained by the project co-directors but may be transferred to an administrative partner in the future.

As we revise the curriculum we will begin to make a list of possible other instructional staff for components of the curriculum, for a possible future modular approach to teaching IRDL. We have tested this already in the second cohort, inviting three Scholars from cohort 1 to teach (via Skype) the curricular component about the IRB process. Including past Scholars as future instructors of the IRDL curriculum contributes to our goal of influencing a community of practice; with this approach the community will continue to build and support itself.

During these three years we will embark on a series of discussions with library directors for an appropriate fee for IRDL, exploring an expected phased fee structure. We may introduce small fees (a registration fee for accepted Scholars, for example) as tests during these three years, based on the feedback we receive. In Year 1 we will begin to strategize to identify possible sponsors of future IRDLs to offset some costs of running the program.

SCHEDULE OF COMPLETION

Duration of Project: *October 1, 2016-September 30, 2019*

Year 1: October 1, 2016-September 30, 2017

October 2016-December 2016

- Update online application submission site (Project Directors)
- Create promotional materials for IRDL 2017 (Project Directors)
- Finalize logistical planning for the Institute (Project Assistant)
- Configure curriculum for 7-day summer workshop (in person, Project Directors and Instructors)
- Conference call with Advisory Board for progress report (Project Directors and Advisory Board)
- Construct mentor program, solicit mentors (Project Directors and 2 members of Advisory Board)
- Recruit Scholars for the IRDL 2017 (Project Directors, in consultation with Advisory Board and Institute Instructors)
- Open online application submission site from December 1, 2016-February 1, 2017

December 2016-May 2017

- Plan programming surrounding Institute (Project Assistant and Project Directors)
- Determine any pre-Institute activities (reading lists, document preparation) (Project Directors and Instructors)
- Begin conversations about possible sponsors and partners for future IRDLs (Project Directors and Advisory Board)

February 2017

- Review Scholar applications (Project Directors and Advisory Board)

March 2017-April 2017

- Notify Scholars of acceptance to the Institute (April 1) (Project Directors)
- Adjust assessment and evaluation plans (Assessment Team -- Project Directors, Director of Assessment, and Interim Director of Institutional Research)

June 2017

- Deliver 7-day workshop (Instructors, with participation from Project Directors)
- Establish post-training communication and feedback (Project Directors and Instructors)
- Initiate 2017 mentor program (includes evaluative components) (Project Directors, Mentors)
- Select dates for 2018 Institute (Project Directors and Instructors)

July 2017-August 2017

- Conduct internal assessment of the process, focused on the team that planned and conducted the Institute (Director of Assessment and Associate Director of Survey Research)
- Conduct evaluation of workshop, focused on Institute Scholars (Director of Assessment and Associate Director of Survey Research)
- Analyze the results of the assessment of learning outcomes and evaluation of the Institute (Assessment Team)
- Begin revising the IRDL for summer 2018 based on the results of the assessment and evaluation (Project Directors)
- Construct report to Advisory Board of strategic sponsorships and/or partnerships for moving forward, to begin in spring 2018 (Project Directors)

September 2017

- Formally evaluate the entire first year of the project and submit progress report to IMLS (Project Directors)
- Post first-year report documents on website (Project Directors)

Year 2: October 1, 2017-September 30, 2018

October 2017-December 2017

- Create promotional materials for IRDL 2018 (Project Directors)
- Finalize logistical planning for the Institute (Project Assistant)
- Conference call with Advisory Board for progress report (Project Directors and Advisory Board)
- Revise mentor program, solicit mentors (Project Directors and 2 members of Advisory Board)
- Recruit Scholars for the IRDL 2018 (Project Directors, in consultation with Advisory Board and Institute Instructors)
- Open online application submission site from December 1, 2017-February 1, 2018

December 2017-April 2018

- Review assessment and evaluation reports and plan for IRDL 2018 (Assessment Team)
- Plan programming surrounding the Institute (Project Assistant and Project Directors)
- Determine any pre-Institute activities (reading lists, document preparation) (Project Directors and Instructors)
- Take action on pursuing sponsors and/or partners for future IRDLs (Project Directors)

February 2018

- Review Scholar applications (Project Directors and Advisory Board)

March 2018-April 2018

- Notify Scholars of acceptance to the Institute (April 1) (Project Directors)
- Review and revise assessment and evaluation procedures from 2017 (Assessment Team)
- Conduct formal follow-up evaluation of the Institute and post-Institute support mechanisms, focused on the success of IRDL 2017 Scholars (Assessment Team)

June 2018

- Deliver 7-day workshop (Instructors, with participation from Project Directors)
- Establish post-training communication and feedback (Project Directors and Instructors)
- Initiate 2018 mentor program (includes evaluative components) (Project Directors, Mentors)
- Select dates for 2019 Institute (Project Directors and Instructors)

July 2018-August 2018

- Conduct internal assessment of the process, focused on the team that planned and conducted the Institute (Director of Assessment and Associate Director of Survey Research)
- Conduct evaluation of Institute, focused on Institute Scholars (Director of Assessment and Associate Director of Survey Research)
- Analyze the results of the assessment of learning outcomes and evaluation of the Institute (Assessment Team)
- Begin revising the IRDL for summer 2019 based on the results of the assessment and evaluation (Project Directors, Instructors, and Advisory Board)

September 2018

- Formally evaluate the entire second year of the project and submit progress report to IMLS (Project Directors)
- Post second-year report documents on website (Project Directors)

Year 3: October 1, 2018-September 30, 2019

October 2018-December 2018

- Create promotional materials for IRDL 2019 (Project Directors)
- Finalize logistical planning for the Institute (Project Assistant)
- Conference call with Advisory Board for progress report (Project Directors and Advisory Board)
- Recruit Scholars for the IRDL 2019 (Project Directors, in consultation with Advisory Board and Institute Instructors)
- Open online application submission site from December 1, 2018-February 1, 2019

December 2018-April 2019

- Review assessment and evaluation reports and plan for IRDL 2019 (Assessment Team)
- Plan programming surrounding the Institute (Project Assistant and Project Directors)
- Determine any pre-Institute activities (reading lists, document preparation) (Project Directors and Instructors)

February 2019

- Review Scholar applications (Project Directors, Instructors, and Advisory Board)

March 2019-April 2019

- Notify Scholars of acceptance to the Institute (April 1) (Project Directors)
- Review and revise assessment and evaluation procedures from 2018 (Assessment Team)
- Conduct formal follow-up evaluation of the Institute and post-Institute support mechanisms, focused on the success of IRDL 2017 Scholars (Assessment Team)

June 2019

- Deliver 7-day workshop (Instructors, with participation from Project Directors)
- Establish post-training communication and feedback (Project Directors and Instructors)
- Initiate 2019 mentor program (includes evaluative components) (Project Directors, Mentors)
- Select dates for 2020 Institute (Project Directors and Instructors)

July 2019-September 2019

- Conduct formal follow-up evaluation of the Institute and post-Institute support mechanisms, focused on the success of IRDL 2017 and 2018 Scholars (Assessment Team)
- Conduct internal assessment of the process, focused on the team that planned and conducted the Institute (Director of Assessment and Associate Director of Survey Research)
- Conduct evaluation of Institute, focused on Institute Scholars (Director of Assessment and Associate Director of Survey Research)
- Analyze the results of the assessment of learning outcomes and evaluation of the Institute (Assessment Team)
- Conduct evaluation of entire project, focusing on successful strategies; finalize options to continue the Institute beyond the grant period (Project Directors)
- Draft final project reports and post them to project website (Project Director)

Loyola Marymount University (LMU) seeks funding from the Laura Bush 21st Century Librarians Continuing Education program for **Building Research Capability among Academic Librarians (IRDL-2)**, to extend and improve our successful project to connect research and practice among librarians, the Institute for Research Design in Librarianship (IRDL). Funded for three years by IMLS in 2013, IRDL is a continuing education opportunity for academic and research librarians to expand their research skills and increase their output, focused on completing a specific research project. IRDL is aligned with the IMLS Agency-level goal of placing the learner at the center; its design responds directly to the stated needs of working post-MLS/MLIS academic and research librarians (Kennedy & Brancolini, 2012). We are creating an engaging continuing education experience, the centerpiece of which is a summer research workshop hosted by LMU. In the first two years the 47 Scholars selected were from university (37) and college (3) libraries, 3 research institutions, and 1 community college, representing 20 states. The Scholars arrive with a draft research proposal, which they revise throughout a curriculum of social science methods training focused on the applied LIS domain. The Scholars participate in pre-workshop learning activities and receive ongoing support to conduct their research and share their findings during the following year. We have met our goals with regard to diverse librarian participation in the cohorts. We have also made substantial progress in improving IRDL effectiveness and logistics. We have, however, several functional issues that must be addressed if we are to reach our long-range goal of designing a fully sustainable model for IRDL.

During these three years of grant funding we plan to continue offering the Institute, while examining how it is designed, with an expectation of sustainability at the end of this grant period. We will turn our focus to three new evaluative components: 1) determining the appropriate length for the summer workshop, while still covering essential content and establishing the research network; 2) creating a formal mentor component to effectively support the Scholars when they return to their home institutions after the workshop; and 3) measuring the research productivity of the Scholars. We believe that we have created an effective immersive, continuing education program that aids and supports novice librarian researchers in their goal to conduct valid and reliable action research and to disseminate the results. Our focus now is to formalize those components into a sustainable, cost-effective experience. We will identify possible partners and explore options for a fee-based version of IRDL to be implemented following the grant period.

During these three years the Institute for Research Design in Librarianship will:

- Deliver instruction in areas needed to complete the research design for projects proposed by the Scholars.
- Create a workshop environment in which Institute Scholars hone their draft research proposals.
- Foster an environment of collegiality and support in the research process.
- Facilitate the dissemination of research results through publication or presentation.

Potential Impact

The design of IRDL-2 is aligned with the results of a recent content analysis of 42 empirical studies that explored the direct relationship between at least one success factor and increased research productivity among librarians and other professionals (Hoffman, Berg, & Koufogiannakis, 2014). Four of the five factors that were shown to have the most positive effect on research productivity are evident in the design of both IRDL and IRDL-2: education and experience, mentoring, time, and access to and use of resources. The response to the call for participation in IRDL in the first two years – 151 applicants for 47 spaces – confirms our belief that there is no continuing education mechanism in place to assist librarians in gaining experience in designing and planning a research project, then gathering and analyzing data.

Working collaboratively during the time of the Institute reinforces the learning goals and begins to create a culture of scholarship. We are already seeing evidence that providing ongoing support for the year following the Institute is leading to relationships and a support network that persists after the project has ended (note the Scholar collaborations in posters and publications completed after IRDL at <http://irdlonline.org/project-info/irdl-scholar-works-completed/>). In order to sustain that network, we propose to introduce a formal mentorship component during this three-year grant, so that the Scholars are matched with an experienced peer-professional guide to assist during their research project.

We understand that assessing the long-term benefits will be an iterative activity, as we follow the Institute Scholars over time to see how their projects are completed and how they identify their successes. We have devised a communication mechanism for our Scholars to continue conversing with their Institute colleagues and instructors; we view personal learning networks among librarian researchers as an essential component of their success. A 2014 Scholar commented, “IRDL not only set me on the path to producing and properly documenting original research, but it set me up with a network of like-minded Librarians who will help me achieve my goals.”

Proposed Work Plan

An important project activity is recruitment of participants. We will send a call for applicants to all of the distribution lists where we disseminated our 2010 and 2015 research confidence surveys. We will continue to actively solicit applicants via email forums such as ALA Black Caucus, ALA Asian/Pacific American Library Association, ALA Spectrum, REFORMA, ATALM, and other groups that attract librarians of color; our diverse Advisory Board has been crucial in effectively reaching this audience. Our intent in the first three years was to have 30% of each cohort from racially diverse backgrounds; we exceeded that goal and in this proposal we will strive for 40%.

The central project activity will be to plan, offer, evaluate, and revise the Institute, with a focus on sustainability. All other activities will support the Institute and the work of the Scholars throughout the academic year, as they conduct their research projects, analyze the data, interpret the results, and disseminate their findings.

Performance Goals and Outcomes

We have established the following learning outcomes for each cohort. After completing the Institute, Scholars will be able to: competently design and conduct a research project; effectively communicate the results of research through publication or presentation; create a research network, and; disseminate the results of their applied or theoretical research project. Additional indicators of success will include the number of projects successfully launched by Institute Scholars, collaborations in new research, and the confidence Scholars feel in their ability to conduct successful research; we have measurement mechanisms in place to track these indicators and plan to share our findings in the library literature (view our completed publications and presentations at <http://irdlonline.org/publications/>).

The long-range goal of this project is to increase the quality of the design of research projects conducted in the field of information and library science. We seek to create a pervasive culture of research and evidence among academic and research librarians and give them the tools to achieve their objectives. By providing a specialized curriculum for academic and research librarians that will permit them to competently complete the design of a research project, learn how to effectively communicate their findings, and begin to create their own networks of research partners, we expect to produce a diverse cohort of Scholars that will raise the expectations for practitioner research can be accomplished in the field. Evaluation of the project will be ongoing. A particular focus of the upcoming three years will be to examine the components that make up the workshop, to determine which are essential and how some may be moved to an online format instead of in-person. This examination will provide us guidance for sustainability of IRDL.

Estimated Budget

The IMLS-funded portion of the budget (\$390,000) will be used to pay for the following project-related expenses: travel and subsistence costs for nine days for 20 Institute Scholars each year for three years; travel expenses and subsistence costs for ten days and fees for the three instructors who will conduct the Institute, and facilitate ongoing learning experiences; and stipends for the mentors and academic librarian researchers who will serve as Institute resources. The exit surveys of the participants found that 76% of the Scholars rated the level of difficulty of being away from their home libraries for 12 days as neutral/easy/very easy; however, we will experiment with reducing the number of in-person workshop days in a cost-efficiency/sustainability effort. All other expenses will be covered by university cost share.

Project Directors and Partners

Marie R. Kennedy, Serials & Electronic Resources Librarian at LMU, will serve as project director and PI.

Kristine Brancolini, Dean of the Library at LMU, will co-direct the project, serving as co-Investigator.

Partners. *San Jose State University School of Information* will provide guidance on the development of some online components of IRDL, in consideration of sustainability. *Statewide California Electronic Library Consortium (SCELC)* will assist in recruiting Institute participants from member libraries, provide input into the development of the Institute and coordinate a Research Day each year.

Advisory Board, Assessment Team. The project co-directors have developed an eight-person Advisory Board and two-person Assessment Team to provide continual guidance and evaluation of this project.

Hoffman, K., Berg, S. A., & Koufogiannakis, D. (2014). Examining success: Identifying factors that contribute to research productivity across librarianship and other disciplines. *Library and Information Research* 38(119): 13-28.

Kennedy, M. R. & Brancolini, K. R. (2012). Academic librarian research: A survey of attitudes, involvement, and perceived capabilities. *College & Research Libraries* 73(5): 431-448.