Partnerships
Start-Up
Research

Zoe Borovsky, Peter Broadwell, Claudia Horning, and Martin Klein

DRAFT: DIGITAL RESEARCH START-UP PARTNERSHIPS FOR GRADUATE STUDENTS IN THE UCLA LIBRARY, SUMMER 2016

Increasingly, humanities scholars (and scholars in humanistic social sciences) recognize the value of digital research tools and methods such as text-mining and spatial analysis. As more content is digitized these methods are becoming more useful, especially to graduate students who are at a formative stage in their careers. However, even if these researchers assemble a collection of digitized resources, these resources may not be in a format that is conducive to digital methods.

We propose continuing our successful program of partnerships, assisting UCLA graduate students with initiating digital research projects. Students would be encouraged to apply for the partnerships that could be used, during the summer to:

- digitize, transcribe, geo-reference or perform OCR¹ on materials
- write scripts to "mine" data from digitized collections (e.g. Hathi Trust)
- create metadata following appropriate standards
- convert materials from one format to another (e.g. raw text to spreadsheet)
- collect data from social media
- crawl and/or archive websites
- prepare data for storage or publication in a repository

The purpose of the partnerships would be to engage librarians with researchers in the process of moving from digital collection-building to analysis to publication, partnering with young scholars as they navigate the various types of expertise needed during this process.

1. BACKGROUND

We piloted this project last summer with six UCLA graduate students. With funding from University Librarian Ginny Steel, we hired one graduate student assistant to work full-time for six weeks. The program was extremely successful, and we would like, this summer, to expand to twelve graduate students with projects. We presented our work at the recent Infrastructure Symposium organized by UCLA's Center for Digital Humanities. The feedback from our colleagues at peer institutions was overwhelmingly positive. In particular, the discussion of our presentation emphasized the unique strategy — of framing these engagements as **partnerships** rather than more traditional fellowships.

2015 Partners:

• Mike D'Errico and Tiffany Naiman, Musicology: Global time-map of Electronic Dance Music clubs

¹Optical Character Recognition (OCR) is a process that "reads" or "recognizes" the images of the characters on a page of text, and turns that into machine-readable text. The process makes a text searchable.

- Diana Ascher, Information Studies: Network analysis of tweets by social media managers of Los Angeles-based news organizations
- Nina Flores, Urban Planning: Twitter analysis of street harassment in public spaces
- Anat Mooreville, History: Time-map of WHO regional affiliations in the Eastern Mediterranean
- Andrew deWaard, Cinema and Media Studies: Visualizations of media references in the TV series "30 Rock"

2. ADMINISTRATION/PERSONNEL

Last summer, we formed a core and an extended team of library staff. The core team was made up of one representative from Metadata (Claudia Horning), CRIS (Zoe Borovsky), the Digital Library Program (Peter Broadwell), our faculty advisor (Jonathan Crisman, Architecture), and our (paid) graduate student assistant (Yan Liang). We assembled an extended team to serve as advisors and to assist with tutorials:

Martin Klein, Edson Smith, Scout Calvert, Heather Briston, Alyssa Loera and Andy Rutkowski.

Core and extended team

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This staffing model worked well. This summer we propose to hire **two graduate-student assistants**, and assemble two core teams in addition to an extended team. This will allow us to work in small teams without over-extending our core team members. The core teams will work as a committee to hire the student workers, solicit, review and select projects, and oversee the project work during the summer. The student workers will be supervised by Zoe Borovsky. In addition, the following staff have volunteered to serve on core teams: Peter Broadwell, Claudia Horning, Martin

Klein, Dawn Childress, Andy Rutkowski, and Anthony Caldwell (from CDH). If funding for the student assistants is approved, we will seek additional volunteers to serve as extended team members. We will ask Jonathan Crisman to serve again as faculty advisor for both teams.

3. IMPACT/ASSESSMENT

We expected that the partnerships with graduate students would amplify the value and significance of the library's contribution to the digital research process at UCLA. Feedback from the graduate students was uniformly positive, with expressions of gratitude and appreciation for the vast and deep expertise of library staff. Our unexpected finding was how much library staff on the core and extended teams appreciated working together and being connected with their colleagues in other departments. We believe that continuing the program provides value internally, by connecting staff who are working in separate departments, as well as externally.

4. COSTS/BUDGET

We are seeking total funding of \$9660.00 for Summer 2016. The funds would be used to 1) hire two technically savvy students who would work 40 hours per week for six weeks during the summer on these

projects (\$8160.00), 2) up to \$1000 for digitization or OCR work, and 3) \$500 to create promotional materials and to purchase refreshments for three events: an information session for applicants during Spring Quarter, a half-day Boot-Camp at the beginning of the summer, and, in Fall Quarter, a presentation of the projects.

Item	Calculation	Amount
2 Student employees	\$17 x 40 hours/week for 6 weeks ³	\$8160.00
Digitization		\$1000.00
Events, promotion	One information session, one half-day Boot Camp, one presentation of projects.	\$ 500.00
Total		\$9660.00

The purpose of these partnerships is to "jump-start" 10 graduate student projects: establishing a customized workflow and putting best practices in place so that the applicant then can complete the work. Our promotional materials and the application process explain the terms of the partnership and how it differs from a traditional fellowship. Partners receive a week's worth of collaboration and consultation with library staff on their project. In addition, they can participate in weekly tutorials taught by library staff and they will have access to the workspaces in the Scholarly Innovation Lab.

The Boot-Camp will reinforce the importance of collaboration with library staff as the project is designed and developed. We will emphasize that the goal for these partnerships is to produce a work-plan or prototype rather than a completed project. Participants should view these partnerships as a time to build their own skills and expertise so that they are prepared to continue the work at the end of the partnership period. The Boot-Camp will provide an orientation that will help introduce the applicants to the basic tools, methods, concepts and skills that are relevant for their projects.

We realize that digital projects can place demands upon library staff who may wish to contribute valuable expertise (and resources) but whose time may be limited. By sharing project applications early on with other units--such as SRLF for digitization requests, or Special Collections for projects involving their collections--we will allow these units and experts a chance to help us scope the projects and set reasonable expectations before work begins. Because of staffing and resource constraints during Summer 2016 in UCLA's Special Collections department, we would also limit the scope of the approved partnerships that include work on Special Collections materials to collections that have already been digitized/described. However, a key strength of the program and digital research is the vision of encouraging graduate students to draw interdisciplinary connections between UCLA's many collections.

² If not all this money is used, then we will use the funds to extend the work of the student(s).

³ We anticipate that student workers will need some training and orientation to library workflows and environments. Most of the students' time will be spent doing work on projects.

⁴ The value, if we add in the work of the advisory panel, is certainly more. However, understating the dollar amount may help set realistic expectations.

OUTCOMES AND BENEFITS

We expect that expanding the program to include more graduate students this summer will build upon successes last summer. This year, we will aim to establish a blog so that projects, tutorials and progress can be shared with a wider audience. Our aim this year is to hire one graduate student assistant from the Information Studies department, in hopes that we could identify funding so that he/she might continue to work part-time during the academic year. This position would allow us to continue offering tutorials developed during the summer—and pairing those with student presentations of their projects.

6. TIMELINE

	Hire student technical expert	Call for applicants/partners
Beginning of Spring Quarter	Post job description and advertise the student positions (ZB). Determine timing of the two core teams. (All)	
Middle of Spring Quarter	Review applications, schedule interviews. (PB, ZB)	Establish a deadline for applications, post application forms, announce the partnerships and hold an information session. (All)
End of Spring Quarter	Finalize hiring decisions (All).	Select projects. Organize the Boot-Camp (All).
Beginning of Summer Quarter	Hire the student employee (ZB).	Hold the Boot-Camp (All).
Fall Quarter		Hold event(s) to showcase the projects (All).

Application Phase

The application form will make clear our expectations 1) that researchers will be expected to be present and in communication with staff during their project week, and to participate in the Boot-Camp and weekly tutorials throughout the program. 2) Our goal is to establish a workflow with best practices, one that the researcher her- or himself will be trained to complete. The form will be brief and focus on the researcher's goals rather than asking them to define a specific process. However, we will ask applicants to identify their research question(s), to describe how the project relates to their academic work, to identify their sources (the content), and to list any tools or methods they have explored. Application materials from Summer 2015 are available online.

During this phase the panel will be working towards hiring the student technical experts and determining how best to schedule the work of two core teams. The <u>job description (from 2015)</u> is available online.

Selection Phase

The panel will then meet with the Advising Faculty member (mid-Spring Quarter) and will seek to distribute nominated projects across the two core teams. This will help to ensure that no specialization is later "overloaded" with requests for assistance and will inform the selection of student technical experts. We will reach out to campus technical experts in advance if we anticipate taking on projects that require coordination with resources (such as scanners) or expertise.

Student technical expert(s) will be hired.

Boot-Camp

The Boot-Camp will be a full day of activities. The morning will be spent on introductions and orientation sessions of interest to most of the group. We will solicit suggestions for weekly tutorials based on skills, concepts or methods that the partners suggest. We will present and discuss the weekly schedule of projects. The afternoon will have small-group or one-on-one sessions. The Digital Library Program and invited experts will work with graduate student researchers and the student technical expert(s) to identify promising approaches and technologies to apply to projects involving activities such as text markup, mining and analysis, working with large-scale digital corpora and text-access interfaces, and web archiving.

Working Phase

During the summer the core team will meet each Monday with the graduate student to agree upon the work to be done that week. Tuesdays are for tutorials, usually a topic that is related to that week's project, and led by a member of the core or extended team. Tutorials will be open to library staff, alumni of our program, and the broader UCLA community. By Friday, the work on the project should be wrapped up, and the student should feel confident enough to continue to work on their project.

Assessment/Showcase Phase

In the fall, we will ask the researchers to evaluate the project by distributing a brief evaluation form to determine whether the program helped them accomplish their goals. We will seek their feedback on ways to improve the program. Finally we will hold a small reception to showcase the projects undertaken. While many projects may still be on-going, we hope to show progress and to encourage other graduate students to consider applying for the next round.

7. PROJECT MANAGER

Zoe Borovsky will manage the project, supervise the student workers, and coordinate with the faculty advisory member.

8. Publicity

Announcements of the partnerships could be sent through library-liaisons to their departments, posted on library website and featured on digital signage in the Research Library. A short information-session and the half-day Boot-Camp could be held in the Research Commons Classroom. In Fall Quarter, we would host an event that showcases the student projects and, ideally, invites new applicants for the next summer.

EXAMPLE

We have been asked to provide an example of the type of project we would hope to attract and how we envision a partnership unfolding.

Imagine that a graduate student wants to create a set of digitized historical maps of Africa as part of her dissertation. She has found two books in YRL library with about 40 colored maps. The project she envisions involves digitizing the maps and visualizing them in Google Earth.

The panel, on reviewing the application, ensures that the proposed work and method "matches" the research questions. We estimate the work involved: digitization and geo-referencing of the digitized maps — with an eye towards our own time/skills, and those of the student worker. After reviewing all applications, we would meet and discuss each application collectively, producing a rough scoping document for the work over the summer. This scoping document (along with all applications) would then be shared with SRLF and Digital Library team to ensure that they could accommodate the work we propose to undertake. This project becomes one of the approved partnerships.

During the orientation session, the graduate student would meet with her project team (Peter, Claudia, Zoe and the student worker) and begin a work-plan. The work-plan would include follow-up meetings such as:

- A meeting with Claudia Horning to develop a metadata model for the project, including the use of appropriate controlled vocabularies.
- A meeting with Peter Broadwell to learn how maps are geo-referenced.

Once the meta-data model is agreed upon Claudia could provide initial training and review for the student worker. Peter Broadwell would help the student worker begin geo-referencing the more difficult maps. The applicant would then be trained to create the remaining meta-data and finish geo-referencing the maps during a "hand-off" session (or sessions) when the applicant and the student worker can perform the work together. After the hand-off session, Claudia and Peter would be available as a resource for questions or problems.

The goal is to alleviate some of the trial and error during the start-up period, while placing the ultimate responsibility for the work on the graduate student.

FEEDBACK FROM 2015 PARTICIPANTS

- "This program was amazing! The flexibility of the program structure, coupled with the wide range of staff skills and expertise worked to produce what seemed like endless ideas for approaching data visualization and more. The handouts were also especially helpful because I was able to print and re-visit on my own time."
- "It felt like a real collaboration as they truly listened to what we wanted to try and accomplish and helped to make that happen."
- "When I have done other things such as this the people running the program tend to want to fit
 your idea into what they already know and would rather you make the changes than try to learn
 along with you about how you can accomplish your own vision."
- "The format of this program in terms of a new focus each week really worked well for me. As
 someone who was not very familiar with my options for visualizing data, the format helped me
 focus my attention each week as opposed to being overwhelmed by options."

SUPPORTING STATEMENTS

From Jennifer Osorio, CRIS:

As interim head of CRIS, I support Zoe Borovsky and Andy Rutkowski's involvement with this project and have agreed to contribute \$1,000 towards its funding. The CRIS department has discussed this project and agrees that it will assist with building cross-unit cooperation, is a step forward for the library in sustaining longer term relationships with graduate students doing this type of research and will help build a digital humanities community of users that will engage with the library on a more sustained and engaged level. I hope to see this program expand as the library's role in these projects grows and deepens.

From John Riemer, Cataloging and Metadata Center:

As Head of the Cataloging & Metadata Center, I am pleased to support Claudia Horning's proposed involvement in the experimentation with a new library service. Graduate students would gain working knowledge of digital research tools and methods, while the Library would gain wider awareness of its services, as well as an opportunity to collect a copy of the digital objects created. I see in the proposal a good, plausible balance between what the Library gives and gets back in return. A wide range of functional areas from across the Library is thoughtfully included to make a robust offering.

From Lisa McAulay, Digital Library Program:

As the Interim Head of the Digital Library Program, I enthusiastically support the participation of Peter Broadwell, Andy Rutkowski, and Dawn Childress in the Digital Research Start-Up Partnerships envisioned in this proposal. I see the partnerships as a welcome addition to, and natural extension of, our plans to build a Digital Scholarship Center in the UCLA Library. A crucial aspect of building communities of practice around such a center is to define ways of encouraging and supporting graduate students who seek guidance as they undertake digital projects. Although the Digital Library team has provided some workshops, we have witnessed an increasing demand to support digital projects that involve expertise across several library departments.

From Jillian Cuellar, Special Collections:

Library Special Collections has considerably expanded its ability to initiate and realize digitization and digital scholarship projects in the last few years. Much of this work has been concentrated in the Center for Primary Research & Training, which has enabled us to integrate digital library practice more fully into contemporary scholarship. However, we are constrained by staffing and space resources that prevent us from serving an even wider student base. The Digital Research Start-Up partnerships that Zoe Borovsky, Claudia Horning and Pete Broadwell are proposing would help build capacity across the library for engaging students with hand-on digital library practice and expose them to the wide range of expertise that librarians and digital humanists offer. It would provide students with an integrated educational experience through which they will be able to develop the deeper understanding and broader skillset that is necessary to pursue forward-thinking digital scholarship, and better position the Library to establish strong partnerships with the graduate research community.