Tulane University Faculty Survey: Analytical Report of Findings
# Table of Contents

Overview .......................................................................................................................... 3
Discovery .......................................................................................................................... 5
Access ............................................................................................................................... 8
Student Research Skills ................................................................................................. 10
Research Topics and Practices ....................................................................................... 11
Research dissemination ................................................................................................. 12
Data preservation and management ............................................................................... 14
The role of the library ..................................................................................................... 16
Overview

The following report provides an analytical narrative of the results of the Ithaka S+R Local Faculty Survey, which was administered at Tulane University to 1,180 faculty members. The survey instrument covers many scholarly research and teaching-related topics, overlapping with the 2012 Ithaka S+R U.S. Faculty Survey, and in part overlapping with other previous iterations of the Ithaka S+R U.S. Faculty Survey. This analysis covers topics in several key areas, including: how scholars discover and access materials for research; faculty members’ research practices; data preservation and management behaviors; student research skills; research dissemination; and the role of the library in supporting faculty members’ needs.

In addition to an analysis of the Tulane findings, comparisons are also drawn against the 2012 U.S. Faculty Survey.¹ For context in interpreting the Tulane findings, we also present the aggregate national-level results by Tulane’s Carnegie Classification (Research Universities – very high research activity, or “RU/VH” referred to by the standard abbreviation “R1” below in the report). The 2012 Faculty Survey was the fifth iteration of this survey that Ithaka S+R has run triennially since 2000. In 2012, Ithaka S+R sent email invitations to 160,008 randomly selected faculty members in the U.S., and received 5,261 completed responses, including 1,708 completed responses from faculty members across 96 of the 108 institutions classified as R1s under the Carnegie framework.

During winter 2014, all Tulane faculty members received an email invitation to participate in a survey about the impact of electronic technologies on their research and teaching. One reminder was sent before the close of the survey. In total, 476 respondents clicked the survey link (about 40%), with 459 of those starting the survey (about 39%), and 342 of those completing the survey (about 29%), including 95 free-response comments.² A total of 88 medical faculty members completed the survey, compared with 254 non-medical faculty members in other disciplines who completed the survey.³ Since the 2012 Ithaka S+R US Faculty Survey did not include medical faculty members, we report findings for Tulane medical faculty members and additional sub-group level analyses for further context.⁴

² This report does not include or report partially completed responses in any analyses.
³ Medical faculty members include respondents who indicated that they are primarily affiliated with the School of Medicine, in addition to those respondents who indicated they are affiliated with any of the following departments: Epidemiology; Neurosurgery; Surgery; Tropical Medicine; or Urology. Non-medical faculty members include all other respondents.
⁴ The companion overview report of findings of the Tulane Local Faculty Survey provides aggregate numbers for all respondents, including medical and non-medical faculty members.
Due to the survey flow and skip patterns, not all Tulane faculty member respondents received every question in the survey instrument.
Discovery

When exploring the scholarly literature, non-medical Tulane faculty members’ most common starting point is a general purpose search engine (39%), compared with 34% faculty members at R1 institutions nationally. The second most common starting point is a specific resource or database (36%), compared with 46% of their peers nationally. A slightly greater share of non-medical respondents at Tulane start at the library’s online catalog (22%) compared with the share of faculty members nationally (21%), and this difference is greater when compared with the share of faculty members nationally at R1 institutions (18%). Tulane non-medical faculty members also diverge from their peers nationally in their use of the other two possible online starting points regarding the discovery of scholarly content. Only 3% of Tulane non-medical respondents reported beginning their search at a physical library building, but this is consistent with faculty members nationally at R1 institutions (3%).

Sub-group analyses demonstrate the importance of disciplines in shaping or contributing to scholarly discovery practices at Tulane. The practices of medical faculty members at Tulane align more closely with their peers nationally than with their Tulane colleagues. As Table 1 shows, this is highlighted by the 49% of Tulane medical faculty members who indicate that they start their search for scholarly literature at a specific electronic research resource or computer database, and the 34% of medical faculty members who indicated that they start at a general purpose search engine.

The discovery practices of science and engineering faculty are also more in line with medical faculty members than with other faculty members, with 47% of scientists and engineers reporting that they start their search for scholarly literature at a specific electronic research resource or computer database and 33% indicating that they start at a general purpose search engine. Interestingly, a greater share (33%) of Tulane faculty members affiliated with the School of Liberal Arts indicate that they start at the library’s online catalog compared with 18% of science and engineering faculty members, and 15% of medical faculty members.
When searching for “a specific piece of scholarly literature that” faculty members “already know about but do not have in hand,” 44% of non-medical Tulane faculty members indicate that they start at the Tulane library’s website. This share is consistent with the national results (42%) and is also consistent with the national results for R1 universities (41%). The second most common starting point is a specific scholarly database or search engine (38%), which remains consistent with the 35% of faculty members nationally at R1 universities.

At the disciplinary level of analysis, medical faculty members and faculty members affiliated with the School of Science and Engineering at Tulane again diverge from other faculty members, with 53% of medical respondents, and 63% of science and engineering respondents, indicating that they start their search for specific items that they “already know about but do not have in hand” at a specific scholarly database or search engine. Differences at the sub-group level again reflect quite a large gap between faculty members associated with the School of Liberal Arts faculty members compared with other disciplinary groupings of respondents regarding discovery practices. Sixty-four percent of liberal arts faculty members start their search for specific items that they “already know about but do not have in hand” at the Tulane library’s online catalog, compared with 27% of science and engineering faculty members.
When searching for new articles or books, non-medical Tulane faculty members’ most common starting point is a specific scholarly database or search engine (56%), compared with 51% faculty members at R1 institutions nationally. The second most common starting point is the library’s website (24%), which remains consistent with the 26% of faculty members nationally and 21% of faculty members nationally at R1 universities.

Interestingly, Tulane medical faculty members are more consistent with their colleagues when exploring the scholarly literature to “find new journal articles and monographs,” compared with the two other types of searches for academic materials. However, a much smaller share of science and engineering respondents (11%) indicate that they start their searches for new scholarly articles or books at the library’s website, compared with 36% of liberal arts faculty members. A greater share of science and engineering respondents (82%) and medical faculty members (61%) indicate that they begin their search for new articles and books at a specific scholarly database or search engine compared with the share of liberal arts faculty members (42%).

To “keep up” with new research in their field of study, 67% of non-medical respondents indicate that they regularly skim new issues of “key journals,” and 66% of non-medical respondents indicate that they attend conferences or workshops. Similarly, the primary method that medical faculty members at Tulane use to stay current with new research in their fields is regularly skimming new issues of journals (74%), with attending conferences rated as a close second (73%).

The open-ended comments and text fields related to discovery reveal that Tulane faculty members may be frustrated with SearchAll and/or the library website’s user-facing search interface. In addition, Google Scholar was mentioned several times as an additional starting point, with one faculty member affiliated with the School of Social Work suggesting: “It would be very helpful to link Tulane digital with Google Scholar, as other universities have done…”

Overall, these results highlight a disparity in usage regarding the library’s website as a starting point for information discovery between faculty members in liberal arts versus scientific or medical disciplines. A major implication of these results is that Tulane faculty members’ discovery practices and needs differ by disciplinary grouping, suggesting that a single starting point for all may be difficult to implement. If the Tulane Library prioritizes its role as the starting point for faculty research across disciplines, these results indicate there may be an opportunity for the implementation of reviews or increasing promotion regarding the current discovery tools with an emphasis on discipline-specific faculty needs.
Access

The Tulane Library’s collecting and content provision role appears to be changing in ways that are broadly similar to the typical pattern nationally. About 78% percent of non-medical Tulane faculty members depend upon the library for access to journal articles and scholarly monographs, and about 68% report that freely available materials online are also important, and these shares are highly consistent with R1 faculty members nationally.

Less than half (35%) of non-medical respondents believe that they would often like to use journal articles not in the library’s collections, which is equivalent to the share of faculty members at R1 institutions nationally (35%). As Table 2 shows, when research materials are not immediately available via the library, non-medical faculty members most frequently use the library’s ILL service or search online for a freely available version. Tulane’s non-medical faculty members are slightly less likely than the share of faculty members nationally to give up and look for a different resource. Specifically, 48% of non-medical Tulane faculty members report that they “often” or “occasionally” give up and look for a different resource compared with 50% of faculty members nationally and 54% of R1 faculty members. However, medical faculty members at Tulane diverge from their colleagues, with a much greater share (64%) indicating that they give up when they are not able to find an article immediately through the library’s resources. Overall, non-medical Tulane faculty members recognize the importance of freely available materials online, or open access materials, to a slightly greater extent (88%) as the share of faculty members nationally (86%).

As Table 2 shows, when an article is not immediately available through library services, non-medical faculty members are much more likely to purchase a journal article themselves (45%) than they are to “ask a friend at another institution” for a copy (34%), whereas medical faculty members are much more likely to ask a friend for a copy (36%), and are much less likely to purchase an article themselves (15%). Faculty members at R1 institutions nationally are more likely to purchase a copy directly from a publisher themselves (30%), and are less likely to ask a colleague at another institution for a copy (25%).
However, the key finding related to the access module is that less than half (48%) of non-medical respondents, and even fewer medical faculty members (44%), believe that in such cases for journal articles not in the library’s collections, they can almost always get satisfactory access nevertheless, which is a much lower share compared with the share of faculty members nationally (59%) and faculty members at peer institutions nationally (57%). In addition, the open-ended comments indicate a considerable demand for expanded access to online journal and database subscriptions. It seems likely therefore that Tulane faculty members would benefit from any efforts the library might be able to make to increase the digital information resources that it makes available.
Student Research Skills

More than half of non-medical respondents identified either equally as a researcher or teacher (33%), or more as a teacher than as a researcher (23%), although less than half (45%) believe that the primary purpose of the library should be supporting undergraduate student learning. Less than half of non-medical Tulane faculty members (43%) strongly believe that “my undergraduate students have poor skills related to locating and evaluating scholarly information,” which is roughly consistent with the share of faculty members nationally (49%), and the share of faculty members nationally at R1 colleges and universities (40%). However, non-medical faculty members at Tulane are much less likely to believe that developing such skills is principally their own responsibility (36%) compared with the share of faculty members nationally (47%), and are slightly less likely compared with faculty members nationally at R1 colleges and universities (38%).

A much greater share of non-medical respondents expects upper division students to use secondary scholarly sources beyond direct readings (79%) than expects lower division students to do so (39%). A much greater share expects upper division students to use primary source materials (71%) than expects lower division students to do so (36%). These shares are higher than the national results for R1 colleges and universities in all cases. This suggests that Tulane must be prepared to support a higher density of such needs related to teaching and learning compared to R1 colleges and universities more broadly.

Tulane faculty members have a complicated understanding of the role of the library in supporting undergraduate learning. About 49% of respondents believe that students in their courses “occasionally” interact with Tulane librarians, and 7% believe that such interaction occurs “often.” Another 44% believe that they do so rarely or never. While such interactions are not perceived as occurring frequently, about 47% believe that librarian interactions help significantly with student success, and most of the remainder believe this at least somewhat. This matches well with the 46% of non-medical faculty members that strongly believe that librarians contribute significantly to student learning by helping them make use of secondary and primary sources in their coursework. It also matches well with the 42% who believe that librarians contribute significantly to student learning by helping them develop their research skills.
Research Topics and Practices

Given that non-medical faculty members assign themselves relatively less responsibility to supporting the development of student research skills, an unsurprisingly small minority of 21% report regularly including undergraduate students as collaborators in research projects that they lead. This share is lower than the national results (24%) and is also lower than the national results for R1 colleges and universities (25%). By contrast, 45% of non-medical faculty members at Tulane report that they principally pursue their research alone.

As Table 3 shows, and as was the case with the national findings, both medical and non-medical Tulane faculty members report that their own interests are of greatest importance in defining new areas of research to pursue. Tulane medical faculty members are much more likely than campus colleagues or the national averages to believe that practical factors, such as “available funding,” “practicality or feasibility,” and “accessibility or reproducibility of needed data,” are of importance to them. Does this suggest that they have faced special challenges in defining their research agenda?

Table 3
When you think about new research projects or areas, how important is each of the following in helping you define and select the areas to pursue?*

*Percent of respondents rating each item as “extremely important” (8-10 on a 10-point scale)
Research dissemination

Tulane faculty members’ research dissemination priorities appear to be slightly more oriented to the general public than their peers nationally and among R1 institutions in particular. As Table 4 shows, a much higher share of Tulane faculty members (40%) see the general public as a very important audience for their research, compared with the share of faculty members nationally (31%) and the share of R1 faculty members nationally (28%). In addition, a higher share of Tulane faculty members (57%) see professionals outside of academia as a very important audience, compared with the share of faculty members nationally (52%) and the share of R1 faculty members nationally (48%). At the sub-group level, Tulane medical faculty members (32%) and science and engineering respondents (30%) again align more closely with their peers nationally than with their liberal arts Tulane colleagues (41%) in viewing the general public as an important audience for their research outputs. However, Tulane faculty members are still similar to their peers nationally in seeking an audience for their research consisting principally of other scholars in their own field or discipline.

Table 4
How important is it to you that your research reaches each of the following possible audiences?*

*Percent of respondents rating each item as “extremely important” (8-10 on a 10-point scale)
Consequently, peer reviewed journals, monographs, and conference proceedings, are the channels used by the most Tulane faculty members to share their research findings. Indeed, their audience prioritization even shapes Tulane faculty members’ priorities for selecting journals in which to publish their research. As with the national findings, Tulane respondents’ three most important characteristics in selecting a journal are: wide circulation and reading by scholars in one’s field; a high impact factor and excellent academic reputation; and an average of coverage closely aligned with one’s immediate area of research.

Tulane non-medical faculty members appear uncertain whether they would wish to have publishing support services of the type that the library might be well positioned to provide. The most popular such service, with about 40% indicating that it could be at least somewhat valuable, was managing one’s public web presence, including links to recent scholarship and contact information. However, a large majority of Tulane non-medical faculty members (74%) indicate that this service is already provided. A slightly smaller share value other types of scholarly communications services, including advisory and analytics support with respect to publishing.
Data preservation and management

The Tulane library’s data preservation and management role appears to be changing in ways that reflect a growing demand among faculty members for data-specific types of research and storage services. A slightly smaller share of Tulane non-medical faculty members (74%) indicate that they “accumulate scientific, qualitative, quantitative, or primary source research data” in the course of their research, compared with 78% of faculty members nationally and 79% of faculty members at R1 universities nationally. However, Tulane faculty members’ accumulation of these types of data varies across disciplines. Eighty-nine percent of medical faculty members report that they accumulate these types of research data, compared with 70% of liberal arts faculty members and 79% of science and engineering faculty members. In addition, 67% of Tulane non-medical faculty members indicate that they accumulate “digital collections of image or media research data” in the course of their research.\(^5\)

A greater share of non-medical faculty members (80%) report using data or datasets that they collect themselves as opposed to all other types of datasets, but more than half (52%) of Tulane non-medical respondents report that data that are freely available online are also important to their research. This is consistent with the high share of Tulane non-medical faculty members who report using image or media that they collect themselves (73%), compared with the share of Tulane non-medical respondents who report that image or media data that are freely available online as the second most important source (58%).

A majority of Tulane non-medical faculty members working with research data (59%), and 49% of Tulane non-medical faculty members working with image or media data, prioritize the “ability to update existing datasets” with new data as the most important feature regarding the preservation and management. However, these priorities also vary by discipline, with 74% of medical respondents and 85% of science and engineering respondents prioritizing a data management feature that allows for the ability to update existing datasets, compared with 38% of liberal arts respondents.\(^6\)

A large majority of Tulane non-medical faculty members (88%) indicate that they often organize or manage their data on personal computers, which remains consistent with those faculty members working with research data and image or media data. However, the responses to the research data versions of the questions are presented here.

---

\(^5\) The data management and preservation module included branching based on skip logic so that respondents who indicated that they accumulated both research data and image/media data received only one set of follow-up questions – and respondents who indicated that they collected/used only one of those types of data received the corresponding set of follow-up questions. These questions are almost identical, but there are some slight differences. For example, one version of the question asks respondents about support regarding “research data” whereas the alternate version asks respondents about support regarding “image and media data.”

\(^6\) Due to low numbers of responses for the corresponding image/media items, the responses to the research data versions of the questions are presented here.
members who report that they organize or manage their image or media data on personal computers (86%). About 24% of non-medical respondents report they “find it difficult” to manage their research data or datasets, which again matches well with the nearly 28% of non-medical respondents who report that they “find it difficult” to manage image or media data. A small minority of non-medical faculty members (6-7%) report that the Tulane library manages their research, image, or media data on their behalf. Both a majority of Tulane non-medical faculty members working with research data (62%), and a majority of non-medical respondents working with image or media data (about 59%), ranked freely available software as the most valuable support service for managing or preserving their research data.

Interestingly, Tulane non-medical faculty members who responded to questions about image or media data indicate that they place much greater value in the library as a possible source of support for managing or preserving their data (51%), when compared with Tulane non-medical faculty members who responded to questions about research data (43%). This is consistent with the large majority of Tulane non-medical faculty members (66%) who report preserving the materials themselves “using freely available software or services,” although smaller than the share of faculty members nationally (78%) and much smaller than the share of faculty members at R1 institutions nationally (80%). It is worth noting that medical faculty members report a substantially greater reliance on freely available software in preserving their data (88%) than the national results, and also when compared with their non-medical Tulane colleagues in both liberal arts fields (66%) and science and engineering fields (58%).

These results indicate a clear opportunity for the Tulane library to be involved in promoting the benefits of preserving data, managing data, planning for the long-term storage of data, and making data freely available online via an open access repository or database. In addition, the Tulane library may be well-situated to provide advice or consultation on compliance with federal mandates regarding open access publishing of publicly funded scholarly research involving the creation or accumulation of primary source data.
The role of the library

Less than half (49%) of Tulane non-medical faculty members indicate they are very dependent on the library for conducting research. As Table 5 shows, the highest share of Tulane non-medical faculty members (86%) indicate that paying for resources they need, from academic journals to books to electronic databases, is a very important role of the library — what Ithaka S+R refers to as the “buyer” role. Two other roles are also valued highly by over two-thirds of respondents. First, and of note, is that a higher share of Tulane non-medical faculty members value the library’s role in serving as a repository or archive of resources (76%), compared with the share of faculty members nationally (64%) and the share of R1 faculty members nationally (68%). This provides compelling evidence suggesting that the Tulane library may be situated to partner with other campus service providers in providing more integrated and comprehensive scholarly communications and data preservation services.

Table 5
How important is it to you that your college or university library provides each of the functions below or serves in the capacity listed below?*

*Percent of respondents rating each item as “extremely important” (5-6 on a 6-point scale)
Second, the share of Tulane non-medical faculty members who view the library as a gateway for the discovery of scholarly content (62%) is slightly smaller than the share of faculty members nationally (67%), but remains consistent with the share of faculty members at R1 institutions nationally (61%). It is also worth noting that a much greater share of medical faculty members (62%) report that they value the library’s role in providing “active support that helps to increase the productivity” of their research, compared with non-medical faculty members (55%), and faculty members at R1 institutions nationally (45%).

In addition, a greater share of liberal arts faculty members (72%) value the library’s role in supporting instructional activities, compared with medical faculty (48%), science and engineering faculty (46%), and R1 faculty members nationally (45%). More than half of non-medical Tulane faculty members also believe that the library plays a significant role in developing undergraduates’ information literacy skills, although this is not among faculty members’ top priorities. It is clear from these results that faculty members in liberal arts fields highly value the library’s instructional services.

In general, Tulane’s faculty members are supportive of the library and its staff, but the level of support varies substantially across disciplines, with 27% of medical faculty and a concerning 40% of science and engineering faculty reporting that they believe the role librarians play at Tulane is becoming much less important, compared with about 12% of liberal arts faculty and 23% of faculty members at R1 institutions nationally. In addition, about 35% of science and engineering faculty members believe that “colleges and universities should redirect the money spent on library buildings and staff to other needs,” and 14% of liberal arts faculty members and 26% of medical faculty members strongly agree with that statement, compared with faculty members at R1 institutions nationally (16%). As Table 6 shows, these findings come into especially stark relief in comparison with the national R1 averages for medical faculty members and for faculty members in the sciences and engineering disciplinary grouping.
Some of the findings about the role of the library raise questions about whether strategic communications initiatives, or perhaps a renewed approach to engaging and serving medical and science and engineering faculty members beyond collections, might be helpful.

Ithaka S+R believes that these topics are among those that are valuable to track for change over time.