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Executive Summary

Introduction

Entrepreneurship has long been a part of higher education curriculums, particularly within faculties of management and business. Just as research has become multidisciplinary and data intensive, so too has the competitive business environment. More recently, the focus has been on expanding entrepreneurship outside of the business schools and bringing opportunities to students within other faculties. The purpose of campus entrepreneurship initiatives is to provide faculty and students outside of the traditional business programs the opportunity to participate in, and collaborate with their colleagues and peers in the development of new technologies, ideas, and businesses, both inside and outside of the classroom. This has been, in part, supported by higher education’s growing emphasis on experiential learning opportunities to enhance engagement and prepare students for the workforce.

Library support for entrepreneurship has typically been provided through business libraries and/or librarians. The knowledge and expertise these discipline-specific librarians offer faculty and students can be enhanced and expanded through collaborations with functional specialist librarians in areas such as data services, GIS, digitization, makerspaces, etc., providing many opportunities for librarians outside of business schools to become involved with entrepreneurship activities. While many of the current services offered to faculty and students can be extended to support new experiential learning models, research libraries may be developing specific services and/or collections to support emerging models of entrepreneurship on campuses.

In this survey, entrepreneurship opportunities are described as courses, programs, activities, facilities, funding, and support that provide faculty, staff, and students the opportunity to develop entrepreneurial knowledge and skills and/or launch new companies or ventures, both inside and outside of the classroom. Activities can include formal courses and programs, co-curricular or extracurricular activities such as bootcamps, business plan competitions, or internships. The unique feature of campus-wide initiatives is that they are not limited to, or reside in a specific faculty, school, or program. Physically, they may be dispersed around and even off-campus, residing in multiple faculties, departments, or facilities, including incubators, accelerators, or SmartParks. They may be centrally coordinated by a separate office of campus entrepreneurship or be a loosely coordinated set of offerings by various campus stakeholders.

The purpose of this survey was to investigate how ARL member libraries are supporting campus entrepreneurship, both inside and outside of the classroom. It asked about the types of library services and resources, funding models, staffing and administrative support, assessment, and the unique challenges of supporting these programs. These results are based on responses from 60 of the 124 ARL member libraries (48%) by the deadline of March 31, 2017.
**Campus-wide Focus on Entrepreneurship**

Of the 60 responding libraries, 50 (83%) indicated that their institution has identified expanding innovation and entrepreneurship opportunities and support throughout the university as a strategic priority. Commitments range from the simple “…promoting the development of intellectual property and the promotion of economic development,” to more ambitious endeavors that aim to “…institutionalize the conditions for innovation…” or envision “…supporting partnerships and translating research into action…” Goals include increasing research commercialization, technology transfer and licensing, public-private partnerships, and growing the number of start-ups arising from their institutions. These institutions want to work with the business community both locally and globally to create opportunities for student internships and alumni employment, develop collaborative spaces, and access equipment to help develop ideas. They want to create the right environment and conditions for innovation, supported by access to experts, grants, and seed funding. Supporting entrepreneurship programs aimed at specific populations, such as women and veterans, is another important goal for some institutions.

The institutions that are developing and growing their support of entrepreneurship across the campus see it as an investment in their organization. Strong entrepreneurship programs are seen as important for attracting students, faculty, and staff. They are offering university-wide entrepreneurship minors, and providing incentives for faculty to participate as student mentors for projects that translate research discoveries into applications. They see entrepreneurship activities as “translational learning opportunities.” There are benefits to be gained as well by serving the community and public good, and attracting external partnerships.

**Library’s Support for Entrepreneurship Activities**

The overwhelming majority of responding libraries (45 or 82%) are providing support and/or services to campus entrepreneurship activities on an ongoing basis. This support takes many different forms. Most often, services are provided by the business librarian and involves support for entrepreneurship course curriculum in the form of classroom instruction, instructional materials (such as handouts, subject guides, and tutorials), and research consultations. Support is also provided via makerspaces and their associated technologies, either through financial support of these spaces and programs or through staff expertise. At Syracuse University, Blackstone LaunchPad, their innovation and entrepreneurship resource center founded in 2016 and supported by seed funding grants from the Blackstone Charitable Foundation, is located within the Bird Library.

**Organization of Entrepreneurship Activities**

At the responding institutions, the coordination of entrepreneurship activities on campus is fairly evenly split among separate entrepreneurship centers in different faculties/schools (29%), various stakeholders that loosely coordinate activities (21%), and other structures (24%). Many comments regarding the coordination of efforts on campus suggested that in actual fact, coordination is lacking. As one respondent commented, “The various entrepreneurial entities and stakeholders are certainly aware of one another, but basically it’s a free-for-all.” Even compiling a list of all of the programs and activities that support entrepreneurship on campus is elusive. Most often, entrepreneurship centers, programs, and activities originate from within the business school. Engineering faculties are also leaders on campus of entrepreneurship opportunities, and partnerships with the business schools are common. Often times there are partnerships between the faculties and the institution's technology transfer or commercialization offices. Law schools were mentioned as also providing programs and support in the areas of intellectual property and business law. Medicine and biotechnology have traditionally been strong areas for commercialization activities. Newer entrants into entrepreneurship and start-up area include information schools, architecture, music, and social sciences faculties, and libraries. In libraries
we are seeing makerspaces and digital scholarship as leading activities related to entrepreneurship, in addition to traditional information and instructional services.

Growing areas of interest include programs in social entrepreneurship such as Duke University’s Center for the Advancement of Social Entrepreneurship, and those focused on specific populations, such as Syracuse’s WISE (Women Ignited in the Spirit of Entrepreneurship) and Florida State University’s Jim Moran Institute for Global Entrepreneurship’s bootcamps for veterans with disabilities and veterans’ families. Additional campus support for entrepreneurship is provided by various student services, such as career centers, and university-sponsored programs that offer seed funding and grants, sponsorship of campus business competitions, and support for student-led clubs. The University of Illinois at Urbana-Champaign even offers Innovation LLC, a residence for entrepreneurial students to live and create with like-minded students. Residents have access to a dedicated workspace to develop their ideas, visits with successful entrepreneurs and innovators, and on-site staff and mentoring to develop their businesses and projects. Finally, there is a growth of business/entrepreneurship minors that are open to all students, regardless of faculty.

Three-quarters of the responding libraries indicated that the library does not play a role in directing or coordinating campus entrepreneurship activities. However, in some cases, library staff are members of campus entrepreneurship programs’ advisory boards or steering committees. At Syracuse’s Blackstone LaunchPad (one of twenty LaunchPads across the US and Ireland), the dean of libraries and university librarian is the principal investigator. The survey did ask if the library had a policy, service-level agreement, or memorandum of understanding with any of the institutional units that describes the ways in which the library supports entrepreneurship activities, only one library indicated it did.

Library Staff Support for Entrepreneurship

The majority of the 58 responding libraries (37 or 64%) have not created staff positions that have primary responsibility for managing or coordinating library services to support entrepreneurial activities on campus. Additionally, another six said that they had no plans to create such a position within their library. While 12 libraries indicated that they had created such positions, only five had titles that suggested managerial roles, such as executive director, director, associate director, manager, or coordinator. The remaining seven are liaison librarian positions with primary responsibility for supporting entrepreneurial activities. An example of a position that does have specific responsibilities for entrepreneurship support is an entrepreneurship librarian, which in addition to traditional reference, instruction, and liaison duties, is responsible for developing and marketing “…specialized services to local businesses, economic development agencies, and related community groups and presents programs on business library resources and services to these groups.” The position also “provides oversight and guidance to the library’s makerspace and represents the library in campus-wide initiatives in this area, including 3-D printing and modeling.” Another entrepreneurship librarian is responsible for coordinating the “…Libraries' efforts to support … initiatives relating to entrepreneurship and economic development.” One library developed a role for a Patent & Trademark Resource Center Representative to provide support in academic class instruction, information and reference service, and patent and trademark education to the community.

Only four libraries (7%) have created other positions to support entrepreneurship activities on campus. These positions are usually related to supporting makerspaces, design studios, new media centers, digital scholarship, etc. These are typically technical positions that require specialized training and skills in newer technologies, such as 3D modeling and printing, laser cutters, digital media and graphic design software, electronics and computer programming, and require staff to have backgrounds in design, architecture, computer science, or engineering. The University of Kentucky created a student
business researcher position that is supervised by a librarian and funded by the Kentucky Small Business Development Center (KSBDC). The student employee provides secondary market research services to the KSBDC counselors who work with entrepreneurs in the community.

The results of the survey suggest that for the responding libraries, business librarians provide the primary library support for entrepreneurship on campus, with engineering librarians being a close second. This mirrors the pattern seen on campuses where business and engineering schools tend to lead campus entrepreneurship activities. However, what was clear from the survey results was that due to the multidisciplinary nature of campus entrepreneurship and the goal of providing opportunities to all faculty and students, regardless of major, that library support requires a team effort. In many cases, support for entrepreneurship requires many different librarian subject specialities and skills. Data, GIS, digital scholarship, and visualization librarians are needed. Support from the science, medical, and law librarian specialities, and support from makerspace and media center staff are all required to fulfill the needs of faculty and students' entrepreneurship endeavours.

Library Resources for Entrepreneurship

Of the 55 library respondents, 47 (86%) indicated that books are the top resource type purchased to support entrepreneurship activities. Specialized databases (43 or 78%) and reference material (39 or 71%) round up the top three types of library resources purchased or licensed specifically to support entrepreneurship activities. It should be noted that a few institutions stated that although they had purchased or licensed these library resources, they were not specifically acquired to support entrepreneurship activities but to support more broadly “academic use.”

In terms of funding, 51 of the 53 responding libraries (96%) indicated that the main library’s general budget was the primary source of funds for purchasing library resources that specifically supported entrepreneurship activities, followed by the business library’s budget (20 or 38%). A minority of respondents use another branch/unit library budget (30%), an academic department/unit budget (28%), or an endowment fund (25%) to purchase resources. The top three resources funded by the main library’s general budget are “books, journals, databases,” data, and software. The same trend is true for the resources funded by the business library’s budget.

Resources are overwhelming located in the main campus library and online (both with 47 responses or 89%). Interestingly, 25 (47%) responded that their resources are located in “another branch/unit library.” More specifically, the branch or unit library more likely to hold library resources for entrepreneurship activities is the engineering library, the science library, or the medical/health sciences library. Surprisingly, the business library was ranked fourth (19 or 36%). Of the small minority that listed “other location,” the most commonly mentioned site was labs such as an “IdeaLab” or “Rolls Royce Rapid Prototype Lab.” When the resources were further split into categories “books, journals, databases,” data, and software were three most commonly found in the main campus library, following in the same order online.

The three core user groups of library resources are students, faculty, and staff, in that order. The general public, alumni, and members of the business community round out the top six users of library resources. The exact pattern continues when resources are further divided into resource types. For instance, students, faculty, and staff are all equally leading users of “books, journals, databases.” The same three user categories are the principal users of data, software, and equipment with students and faculty slightly ahead of staff. The pattern stops when it comes to separating resource types among the bottom three user groups. Interestingly, the top three resource types change to “books, journals, databases,” data, then equipment. At the 10 libraries that reported an “other user category,” walk-ins are allowed on-site access to some, if not most, resources, keeping in mind “some restrictions apply.”
Online Resource License Restrictions

The majority of the responding libraries (42 or 75%) did not need to revise their license agreements or clarify limitations of use for online resources due to expanded entrepreneurial initiatives. Of the 14 that did, most identified the resource that had to have its license revised or usage clarified generally as “business databases” or they named a specific database such as “Bloomberg.”

The most common resource restrictions imposed on libraries are restricted access by IP range (26 responses or 74%), followed by restricted to non-commercial uses (23 or 66%) and in-library use only (18 or 51%).

Of the six responding institutions who provided additional details on licensing agreements unique to entrepreneurship resources, three mentioned that their license agreements include a “walk-in” clause to allow for expanded access to unaffiliated institutional users.

Non-Library Resources for Entrepreneurship

A large minority of responding libraries (28 or 48%) did not know whether their institution’s non-library units purchased or licensed resources to support campus entrepreneurship activities. However, 27 respondents (47%) reported that their non-library units did purchase or license resources to support entrepreneurial activities on campus. The resource type most cited was that of business databases and datasets.

Library Services for Entrepreneurship

The overwhelming majority of responding institutions identified the top three services provided by the library to specifically support entrepreneurship activities as reference, which may include consultation appointments and office hours (52 or 96%); library instruction such as “a series of free workshops covering topics such as copyright and intellectual property…” (96%), and in-depth research, for instance conducting database searches in preparation for an appointment (39 or 72%). Notable examples of these entrepreneurship library services are found in the representative documents section of this SPEC Kit. Providing market research assistance and offering support for business plan competitions are additional services delivered by a majority of responding libraries. A minority are offering patent searching (22 or 41%) and other services (41%), which vary from 3D printing to LibGuides on entrepreneurship.

The results for location of library services fit the pattern observed in location for library resources. The main campus library is the primary location used to offer entrepreneurship services. This is followed by online. Of the responding institutions whose services are offered at another branch/unit library (26 or 48%), engineering, medical/health sciences and science libraries, also known as STEM libraries, were most commonly reported. The business library followed closely in fourth place. For those responding “other location,” business schools were most frequently cited. The specific kinds of services most often offered at the main campus library, another branch/unit library, and the business library are reference, instruction, and research, respectively. This order slightly changes to reference, research, and instruction when offered online.

The core users of library resources are the same for library services: students, faculty, and staff. Alumni, the general public, and members of the business community are the second tier of users of library services. A few respondents mentioned that anyone could use library services. A further breakdown reveals that user demographics for reference services is split evenly among the three core user groups at all the responding libraries. The same split is true for the main users of research services (46 libraries or 87%). There is a noted difference for users of instructional services with students at all libraries, faculty at 50 (94%) and staff at 46 (87%).
Forty-seven of the respondents described a variety of topics covered by library instruction. The top five include market research (64%), industry research (47%), and company research (43%), followed by patent, IP, trademark searching (28%) and general resource overview with searching strategies (23%). Noteworthy examples of entrepreneurship instructional materials are found in the representative documents section.

**New Funds for Entrepreneurship**

Libraries have not received much new or additional funding to support campus entrepreneurship activities. In the cases where funding has been received, it has generally been designated for the purchase or licensing of resources, space, or equipment, such as makerspaces and their associated technologies. Typically, this additional funding has not been specifically earmarked for entrepreneurship activities, but rather to support all educational and research endeavours. New funding has come from alumni, corporate or private donors, endowments, university administration, or grant funding.

**Partners**

Most notable partners are the technology transfer/commercialization office, faculties/departments—business and engineering schools in particular, incubators, accelerators, established campus entrepreneurship centers, and centers for teaching and learning.

Partnership activities include presentations/instruction, collaborating on events, co-funding of business resources, cross-promotion, support for data, visualization, and digital scholarship services, maker services, business plan competitions, and hackathons. For example, at York University, the Steacie Library Hackfest is offered in partnership with LaunchYU and Duke University Libraries partnered with Duke Extend to create and teach an introduction to patents online course.

**Promotion**

Promotion of library resources and services for entrepreneurship mirrors that of typical promotion efforts employed by libraries for other resources and services. The most common methods are ongoing liaison outreach with faculty and students, subject guides and specialized websites, regular contact with staff of the various entrepreneurship centers and programs, and participation in networking events and conferences. Other methods employed by some libraries include cross-promotion on websites, email lists, newsletters, and social media of other campus groups involved in entrepreneurship, and promotion of workshops, presentations, etc. on their online calendars. Liaison with staff of the technology transfer/commercialization office was often cited as a method of promotion and cross-promotion. Some respondents provide specialized support for business plan competitions. More rarely, libraries sponsor innovation contests and give presentations outside of the university community. Encouragingly, one responding library indicated that their marketing plan for library resources and services was in development.

**Gaps in Services**

The most often cited gaps in services are more accurately related to the inability to meet the demand due to insufficient staff, funding for expensive databases, and lack of coordination of library services. In particular, respondents noted gaps in their collections for market research databases and venture capital/angel investing funding databases, private company research, and business plan competition databases. A couple of libraries mentioned that the lack of available local- or state-level market research data is an important gap. Respondents want to be able to provide more specialized and custom research services,
more sophisticated services and support for visualization, product design and development, and expertise in using specialized equipment for innovation.

**Future Plans**

The survey results showed a nearly even split between the development of new products or services and not. New services planned include a suite of workshops covering more aspects of entrepreneurship; in-depth tutorials on specialized resources; new or expanded research guides, web portals, or the library’s website for entrepreneurship resources and services; and tailored support services for specific campus programs. Also planned is access to applied resources such as market research databases, patent databases, emerging technologies and industries, along with support for searching. Libraries would like to be able to provide library access and support for those not currently entitled to access but involved in university-affiliated start-ups. Moving library resources out of the library to entrepreneurship center spaces is another idea for making resources more accessible. Finally, respondents are looking for additional opportunities to be involved in campus entrepreneurship through partnerships with other campus players, including student clubs, sponsoring and supporting events, and creating or improving spaces that support entrepreneurship, such as makerspaces.

**Assessing Library Support for Entrepreneurship**

The majority of responding libraries have not assessed the impact or success of the services they provide to support campus-wide entrepreneurship. Of the 56 libraries that answered this question, only six indicated that they have conducted any assessment. A further 17 have not yet conducted any assessment, but plan to. When assessment is conducted, it typically takes the form of feedback or evaluations of instruction sessions or workshops, standard output statistics, such as number of consultations, database usage, or surveys about space and services. Libraries that are planning to assess their support for campus-entrepreneurship are considering, in addition to the above mentioned metrics, how to measure impact and value.

**Challenges**

Almost all respondents cited budget or funding as one of the biggest challenges to supporting campus entrepreneurship. Not surprisingly, staffing challenges were not far behind. There is much concern about having enough staff to keep up with demand for the ever-expanding number of entrepreneurship programs on campus. Not only are respondents worried about having enough staff, but staff that have the needed competencies and specialized knowledge and skills to support the wide range of needs of entrepreneurs. Also related to budgets, are concerns over the high cost of information resources needed to support entrepreneurship activities. The cost of market research was often cited as a real hindrance for libraries. In addition, there is a minefield of issues around licensing of electronic resources for use by entrepreneurs, as the line between course-work/not-for-profit activities and commercial activities is very blurry. Finally, libraries are finding it challenging to coordinate their support for campus entrepreneurship activities due to the lack of coordination, collaboration, or strategic direction of their institution. There are many existing programs and activities on campus, with new programs continuously being developed by faculties, departments, etc. Respondents feel they are unable to respond to all of the competing demands. Related to this, is the challenges that libraries encounter in providing input or becoming a partner on campus regarding the direction and development of these programs. Finally, getting the message out to campus groups, faculty, and students about what the library can offer would-be entrepreneurs is an ongoing challenge.
Conclusion

Entrepreneurship is alive, well, and thriving on North American campuses, albeit in an uncoordinated and to some extent, unmanageable, way. Responding libraries noted over and over again their frustration with not being able to identify all existing programs and keep up with developments of new programs, activities, and centers devoted to campus entrepreneurship, let alone provide resources and services to them all. While a challenging endeavor, libraries would be wise to invest in the time and energy to inventory their campus’ entrepreneurship programs, identifying missions and visions for each, target audience, services offered, and sources of sponsorship and support. With this information, libraries could start developing policies, procedures, and strategies for how to best support their institution’s entrepreneurship activities. It was clear from the responses that libraries have neither the funds, nor staff available to support all campus activities. Libraries will need to carefully identify those resources and services that can fill gaps and take advantage of the expertise only libraries can provide. The multidisciplinary nature of entrepreneurship means that all unit libraries and library staff need to play a role in supporting entrepreneurship on campus. It is not just the business librarians that need to be involved, but every subject librarian, data librarians, GIS, new media staff, and makerspace assistants, etc. Again, this takes coordination, both of staffing and resources to maximize financial resources, reduce the risk of pulling staff many directions, and ensure quality service. Additionally, entrepreneurship activities regularly occur outside of the classroom in the form of networking events, innovation fairs, contests, bootcamps, and programming in entrepreneurship centers, incubators, and accelerators. These present important opportunities for libraries and librarians to make connections with partners and would-be entrepreneurs. It is important then for libraries to consider flexible schedules and working arrangements that would allow staff to participate in events and provide office hours in centers. Opportunities exist in the areas of instruction in patent and trademark searching, market research and industry data searching, and sourcing local data. Understanding the focus of each campus entrepreneurship program and who they support is important for libraries, as this can affect the terms of license agreements for electronic resources. Libraries may need to review and revise their license agreements, not only for business databases, but for databases and electronic resources in other disciplines that may be used for entrepreneurship activities by users who are not affiliated with the institution. The opportunities for libraries to support campus-wide entrepreneurship are clear and with sufficient investment in resources, they are well positioned to take on this growing institutional trend.
The SPEC Survey on Campus-wide Entrepreneurship was designed by Vera Armann-Keown, Associate University Librarian, Client Services, and Afra Bolefski, Acting Head, Albert D. Cohen Management Library and Liaison to the Asper School of Business, at the University of Manitoba. These results are based on responses from 60 of the 124 ARL member libraries (48%) by the deadline of March 31, 2017. The survey’s introductory text and questions are reproduced below, followed by the response data and selected comments from the respondents.

Entrepreneurship has long been a part of higher education curriculums, particularly within faculties of management and business. Just as research has become multidisciplinary and data intensive, so too has the competitive business environment. More recently, the focus has been on expanding entrepreneurship outside of the business schools and bringing opportunities to students within other faculties. The purpose of campus entrepreneurship initiatives is to provide students outside of the traditional business programs the opportunity to participate in, and collaborate with other students in the development of new technologies, ideas, and businesses, both inside and outside of the classroom. This has been, in part, supported by higher education’s growing emphasis on experiential learning opportunities to enhance engagement and prepare students for the workforce. Universities are developing strategic priorities around innovation and entrepreneurship that extend beyond the business school.

Library support for entrepreneurship has typically been provided through business libraries and/or librarians. The knowledge and expertise these discipline-specific librarians offer faculty and students can be enhanced and expanded through collaborations with functional specialist librarians in areas such as data services, GIS, digitization, makerspaces, etc., providing many opportunities for librarians outside of business schools to become involved with entrepreneurship activities. While many of the current services offered to faculty and students can be extended to support new experiential learning models, research libraries may be developing specific services and/or collections to support emerging models of entrepreneurship on campuses.

The purpose of this survey is to investigate how ARL member libraries are supporting campus entrepreneurship, both inside and outside of the classroom. The survey will gather information about library services and resources, funding models, staffing and administrative support, assessment, and the unique challenges of supporting these programs. The results will benefit libraries looking to develop specific services and collections to support their institution’s strategic priorities in innovation and entrepreneurship.

In this survey, entrepreneurship opportunities are described as courses, programs, activities, facilities, funding, and support that provide faculty, staff, and students the opportunity to develop entrepreneurial
knowledge and skills and/or launch new companies or ventures, both inside and outside of the classroom. Activities can include formal courses and programs, co-curricular or extracurricular activities such as boot camps, business plan competitions, or internships. The unique feature of campus-wide initiatives is that they are not limited to, or reside in a specific faculty, school, or program. Physically, they may be dispersed around and even off-campus, residing in multiple faculties, departments, or facilities, including incubators, accelerators, or SmartParks. They may be centrally coordinated by a separate office of campus entrepreneurship or be a loosely coordinated set of offerings by various campus stakeholders.

**CAMPUS-WIDE FOCUS ON ENTREPRENEURSHIP**

1. **Does your institution have a strategic priority or goals focused on expanding innovation and entrepreneurship opportunities and support throughout the university (i.e., both inside and outside of the classroom) as described in the introduction? N=60**

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<td>50</td>
<td>10</td>
</tr>
<tr>
<td>83%</td>
<td>17%</td>
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</tbody>
</table>

   **Comments N=33**

   **Answered Yes N=29**

   Based on the widely-expressed desires of students, faculty and administration, we are in the process of designing a collaborative space in our main library, where students will go to explore and imagine ideas for social, cultural, community, and economic impact. The library is leading this effort in partnership with diverse campus stakeholders including our entrepreneurship center, career center, community leadership center, student clubs, multidisciplinary faculty, and the community. iZone will let students build skills, access tools and resources, get advice, and connect with a community of collaborators to generate and communicate ideas. The vibrant environment will provide programs, services, and experts focused on supporting ideas, imagination, and innovators.

   Based on York’s Strategic Research Plan, the Office of the Vice-President Research and Innovation (VPRI) developed the Plan for the Intensification and Enhancement of Research (PIER) in 2016. The document pledges to “develop York’s innovation landscape, supporting partnerships and translating research into action” and “develop Markham as a research intensive campus.” It asserts that, “Access to cutting-edge research, entrepreneurship, and innovation opportunities should become one of the reasons that top students are drawn to York University as undergraduates.” VPRI launched the Innovation York initiative in 2010, and it includes an incubator program called YULaunch. As part of the plan, strengthening “Innovation York (to provide) a focal point for engagement for the York Community for industrial liaison, research commercialization and entrepreneurship” is a focus. Additionally, VPRI spearheaded York University’s membership in MaRS Innovation, the commercialization agent for a discovery pipeline to turn the most promising technologies from its members into products and services for local and global markets.

   Duke University’s 2006 strategic plan, “Making a Difference,” states, “We must further develop our capacity to support creative, entrepreneurial, interdisciplinary teaching and research among our faculty and students: Through these efforts, we aim to institutionalize the conditions for innovation and responsive engagement with emerging fields of knowledge, medical and technological challenges, and public policy issues” (p. 25). Numerous programs supporting entrepreneurship have been developed throughout the university, including the creation of the Duke Innovation and Entrepreneurship Initiative in 2013.
Entrepreneurship and economic development activities are part of the university’s strategic plan. Entrepreneurship is identified as a defining area for the university and is one of the eight themes in the strategic plan.

Entrepreneurship is not addressed specifically in the strategic plan, but there are several mentions of related ideas, such as promoting the development of intellectual property and the promotion of economic development. There are several centers on campus dedicated to entrepreneurship.

From the strategic plan: Become a trusted partner with business by increasing integrated public-private partnerships, leveraging the activities of Applied Innovation, fostering entrepreneurship and regional economic development, and cultivating opportunities for student internships and alumni employment.

I think it's important to note that we do not see innovation as being solely linked to entrepreneurship, but rather something to be sought across the university, so we actively work with the humanities as well as traditional STEM and business colleges.

In addition to several programs currently in place around the university, the College of Business has the addition of a university-wide entrepreneurship minor as a strategic goal.

In our institution’s current academic plan a number of goals and strategies focus on innovation and entrepreneurship. Specifically: Create research facilities that support innovation and translation of new discoveries into applications. Encourage student participation in innovation and entrepreneurial activities. Create incentives for students to enroll and engage in translational learning opportunities. Create incentives for faculty participation as student mentors for projects translating research discoveries to applications. Collaborate with industries working in our priority research areas to secure crucial equipment needed to test or license new protocols, products, or techniques that would expand access to markets. Create training opportunities for students from Campus Alberta and provide access to specialized research. Promote partnerships with local and provincial agencies, and industry to accelerate research applications. Encourage university engagement with Innovate Calgary and other commercialization centres (e.g., Biovantage—an Alberta Innovates Technology Futures (AITF) funded commercialization centre). Institute a professional development program for scholars interested in commercializing knowledge. Review and improve our intellectual property (IP) policy and related procedures to support faculty and graduate students engaged in commercialization efforts. Develop simplified “Memoranda of Understanding” for encouraging industrial partnerships while supporting university interests.

Innovation Academy, Innovation Hub, Big Idea-Gator, Business Plan Competition

It is a priority on campus.

It is included in the university’s strategic plan.

More classes require students to solve problems, devise business or marketing plans, or create advertising campaigns for actual organizations. Students conduct market research for potential technologies on behalf of inventors, or develop their own technologies and follow the steps toward commercialization. Students have opportunities to participate in local, regional, or national business plan or case competitions for cash prizes. They can join regional, national, or school-sponsored clubs that manage actual investments. Beyond the expansion in the classroom, the following outcomes are evidence of the university’s decision to make it a strategic priority in recent years: Establishment of the Technology Ventures Office (with a large staff) to “maximize the impact of JHU’s excellence in research by facilitating the translation and commercialization of discoveries into accessible technologies, products, and services for the benefit of society.” Launch of an innovation hub. Investment in an incubator for socially innovative endeavors and an accelerator for health care information technologies. Creation of an entrepreneurship boot camp. Development of a mentors-in-
residence program for entrepreneurship. Other related offices, mainly at East Baltimore, that help JHU faculty get their ideas to market. In addition, the university has developed office and research space in new buildings built in East Baltimore, intended for university-affiliated entrepreneurs to develop their ideas.

One of the university’s goals in our strategic plan is to “produce impactful new knowledge, innovations, and creative works as evidenced by contributions to solving society’s grand challenges”.

“Strengthen existing partnerships, and explore new ones, to promote institutional teaching and research priorities, including the use of public-private partnerships.” — from university strategic plan

The Cornerstone Plan: Pillar 2: Advance knowledge and serve the public through research, scholarship, arts, and innovation. Strategies: Infrastructure and Services: The university will enhance institution-wide infrastructure and services to encourage and support research, scholarship, creative arts, and innovation by faculty and students. These enhancements include everything from administration and support for research grants and library collections and services to computational resources and core laboratory capacity.

The first initiative of university’s strategic goals (2017–2022) is the entrepreneurial mindset as a pervasive, animating force. We believe entrepreneurial principles are very much in keeping with the goals of every aspect of higher education—after all, being a “first mover” in any endeavor starts with a dedication to discovery and transformation. In this spirit, we’ll empower all members of our community to launch solutions early, evaluate results critically, and make improvements continuously. Above all, we want this rapid innovation cycle to be flexible and collaborative, and to reflect profound empathy for the end user—which we define as humanity itself.

The institution’s evolving Campus Plan includes a focus on Innovation. The goal of the working group charged with focusing on Innovation is described as the following: “Against the backdrop of significant external forces that will affect higher education over the next 25 years, Syracuse University will define its own path of change and institutional renewal, one distinguished by its unique past and guided by its virtues. We have a long record of trail-blazing innovation and creativity, including veterans’ programs, entrepreneurial activity, the arts, disability studies, campus-community engagement, and industry partnerships, to name a few. We will strive to ensure that our culture, structures, and mechanisms continue to fuel productive change and empower us to respond nimbly to emerging needs and opportunities. We will work to cultivate an enterprising mindset characterized by visionary thinking and creative problem solving, and the capacity to channel ideas into actions. Such an environment will attract the best and brightest students, faculty, and staff and incite external partnerships with those on the cutting edge.”

The University of California system overall has the President’s Innovation and Entrepreneurship Initiative. This funding is being used differently at each campus. At UCLA, entrepreneurship is being tackled across campus in various departments, schools, groups, etc.

The university’s scorecard includes a goal to increase business start-ups from 13 in 2008 to 34 in 2020.

The university’s strategic plan (2016–2018) Goal 4: Research and Discovery lists technology transfers and licensing as a metric.

There are some campus-wide initiatives as described in the introduction.

This has been a major priority of our university president.

Washington State University Strategic Plan, 2014–2019, has four goals, one of which is Outreach and Engagement. An initiative under that goal is: Increase the amount and impact of intellectual property resulting from WSU research. A metric for measuring progress is: Number of start-up businesses from WSU research and outreach.
We have a Strategic Growth Area (part of destination areas) called Innovation & Entrepreneurship. This is largely focused on curriculum but the overall focus is expanding the innovation ecosystem across campus.

Yes, the university strategic plan does place an emphasis on innovative and creative solutions. This is coupled with additional emphasis on markets, social structures, and public policy. Examples of this emphasis in action include the Kellogg School of Management Innovation and Entrepreneurship Initiative (KIEI), the McCormick School of Engineering Farley Center for Entrepreneurship and Innovation, and the Medill School of Journalism's Media Innovation and Entrepreneurship Specialization.

Yes, we already have this in College of Engineering. Medical school has path of excellence. School of Information has an undergraduate program and we have various accelerators on campus.

Yes. The business school provides plenty of entrepreneurship opportunities for students, not just business students but all majors. The following are some of the competitions available: Rollins Center's Business Model Competition, Mobile App Competition, etc.

**Answered No N=4**

Although the campus vision statement does generically refer to “fueling economic growth” and its top-level public relations message is that the campus is involved in “research and innovation,” which frequently includes entrepreneurial stories. However, there is no well-articulated strategic priority that all the entrepreneurship programs on campus can point to as justification for coordinating. We have a few incubators on campus, and more than one entrepreneurship program, for both undergraduates and graduates. Also, the campus-wide program called Research Experience and Applied Learning does include an opportunity to engage in/create “entrepreneurship activities” for students, but primarily emphasizes other activities such as working with faculty on research projects.

Currently, there is no explicit mention of entrepreneurship in university strategic priorities; most of the focus on entrepreneurship still resides in the College of Business (although there are emerging pockets elsewhere: Engineering, Food Science, etc.)

Entrepreneurship is a strategic theme for the business school, but not for the whole university.

Our institution has many, many entrepreneurship- and innovation-related offices, programs, classes, and co/extra-curricular groups spread across the campus, but there is nothing centralized at the campus level—not an office, person, or document—to coordinate or regulate all of these disparate efforts. Further, there is no apparent coordination, loose or otherwise, to guide the initiatives campus-wide.

**If you answered “No” above, please answer as many of the survey questions as applicable.**

2. **Which of the following statements best describe your library’s current level of support for campus entrepreneurship activities? N=55**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Count</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>We provide support/services on an ongoing basis</td>
<td>45</td>
<td>82%</td>
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<tr>
<td>We are piloting/testing how to support these activities</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>We are actively investigating how to support these activities</td>
<td>9</td>
<td>16%</td>
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**Comments N=24**
Any researcher who needs entrepreneurial support may consult with a business research librarian. Currently, focused on support inside the classroom but looking at opportunities outside the classroom as well.

Librarians provide classroom teaching, instructional materials (handouts, LibGuides, tutorials), and research consultations to support courses offered through the Center for Leadership Education (W.P. Carey Program in Entrepreneurship and Management); Center for Bioengineering Innovation and Design (CBID); Carey Business School (e.g., Discovery to Market course, Business of Healthcare program), JHU’s Entrepreneurship Bootcamp (sponsored by Technology Ventures and the Carey Business School), and the School of Public Health (e.g., Strategic Planning classes in which students partner with real organizations to conduct market research or propose how to sell new technologies).

Cross-collaboration between the business, medical, and engineering librarians of the Sheridan Libraries and East Baltimore campus libraries; the faculty; and the entrepreneurship-related offices at those campuses has been particularly instrumental in supporting the university’s innovations in health-related services, technologies, medical devices, and medicine and pharmaceuticals. A business librarian and informationist provides research consultations to faculty members of the schools of medicine, nursing, and public health who are conducting market research on potential new services and technologies. A few librarians have formed relationships with Technology Ventures staff and enlightened those employees on what library resources and services exist to support their work.

Although the librarians provide reference consultations for students entering business competitions, the extent of support and type of resources promoted varies, depending on the situation, the local policies that the library set with General Counsel and the Associate Director of Collections and Services, and the specific licenses of the data providers. Some rules for competitions specify that students should not seek assistance.

Our library provides strong support for entrepreneurial activities. We have partnered with the Kentucky Small Business Development Center for the last five years to provide market research. KSBDC funds a student researcher (a graduate student from the library science program) who is trained and supervised by the business librarian. The researcher is housed in the library and produces market research to support the clients of the KSBDC. In addition, the business librarian has held training sessions for researchers in the campus Commercialization Center. We also work with entrepreneurs from the general public who need assistance with research.

Our new Maker Hub opened in the library in October 2016, and one of the goals was to support entrepreneurship initiatives with other campus departments.

Support and services to campus entrepreneurship falls under the business librarian’s work in liaising with the College of Business and providing business reference assistance.

Syracuse University Libraries has a long history of supporting entrepreneurship on campus and in the local community, primarily through the services provided via the business librarian (now titled “Business, Management, and Entrepreneurship”) and the business resources in the Libraries’ collections, which are also supported by the bibliographers (now titled “Collection Development and Analysis Librarian”) and the acquisitions and cataloging staff. The Libraries has recently decided to place additional emphasis on entrepreneurship by providing and supporting the Blackstone LaunchPad. The Blackstone LaunchPad, an innovation and entrepreneurship resource center founded in April 2016 and located in Syracuse University Libraries Bird Library, is one of 20 LaunchPads in universities across the United States and Ireland supported by three-year seed funding grants from the Blackstone Charitable Foundation. It is the only LaunchPad whose principal investigator is the dean and university librarian and was the first LaunchPad in the US to be located in a library. The
LaunchPad is accessible during extended hours, can be used for ideation workshops, team meetings, co-working, networking events, training sessions, product launches, and other collaborative activities. It is staffed by an executive director, a program manager, several interns, and is supported by a network of mentors and subject matter experts. The business, management, and entrepreneurship librarian holds office hours in the LaunchPad and receives referrals. In fall 2016, the LaunchPad executive director crowdsourced from faculty across academic programs a list of books on multi-disciplinary topics related to innovation and entrepreneurship. The list has been adopted as suggested reading by those teaching entrepreneurship and related subjects. In November, the Libraries won the Judges Prize at the Charleston Conference Fast Pitch Competition for the idea of embedding this collection in the LaunchPad.

The business librarian supports all patrons with entrepreneurial research needs. Additionally, the business librarian has supported the Entrepreneurship Bootcamp for Veterans with Disabilities, sponsored by the College of Business, for the past four years.

The business library supports the business school as it relates to entrepreneurship resources. While research consultations are available to the wider university community, many subscriptions are licensed for the business school community only.

The commerce librarian provides a LibGuide with a tab and multiple resources for entrepreneurship. The Darden Business School Library provides multiple resources for entrepreneurship.

The library employs one FT business librarian with frequent, direct engagement with the business school, the economics department and less direct and frequent contact with other entrepreneurial faculties on campus (a school of international relations and the engineering school); also this librarian participates in outreach to and referrals from the Technology Transfer Office and student clubs engaged in entrepreneurship. In addition, other subject specialists field some entrepreneurship-related questions (particularly librarians covering the areas of engineering, political sciences, sociology, communications, medicine, pharmacology, areas studies such as Latin America and Asia, data, government documents, and GIS).

The Peter F. Bronfman Business Library provides extensive support to the Schulich School of Business Entrepreneurship programs. Steacie Science and Engineering Library and Peter F. Bronfman Business Library provide support to the Bergeron Entrepreneurs in Science & Technology (BEST) program. This includes collaboration on sponsored events such as Start-up Nights.

There are three business subject specialists at our institution, and all three have active relationships with entrepreneurship courses and co/extra-curricular programs, some stretching back over 15 years.

University Libraries has created a full-time librarian position to provide support and services to entrepreneurs in residence and student entrepreneurs on an ongoing basis. The majority of services focuses on instruction and collection building at this time. Future opportunities are envisioned, including tool development, co-curricular development, and instruction for classes where library resources are important (market research, marketing, funding, etc.) A potential lab class is being developed to support the Jim Moran School of Entrepreneurship’s marketing class for spring 2018.

A major part of the job of the entrepreneurial outreach librarian is to develop services and support structures for faculty and students using library databases and resources. Library resources are often hard to use and require specialized instruction. A set of “workbooks” is currently in production, as well as tools for using resources with the Business Model Canvas tool developed by Strategyzer.

We provide support for entrepreneurial activities—just like every other program of study.

We provide support/services on an ongoing basis for patent and trademark searches, research support, and the Creative Studios, which allow for modeling, prototyping, and training for a variety of areas. We
pilot-tested a 3D printing project with an entrepreneurship class, and we also are pilot testing how to support additional entrepreneurship activities.

We provide support/services on an ongoing basis. Librarians often meet with students participating in competitions that need company and/or marketing information. Librarians are also invited to meetings for students interested in these competitions.

We’ve build both the Innovation @ the Edge and the Innovation @ the Hub to provide support services for entrepreneurship, not to mention offering a liaison librarian in the school of business.

**Answered Actively investigating N=5**

New spaces are opening up for fall 2017. Planning is now happening for that space.

Our current efforts are not very active, but there has been some effort.

The iZone director was hired in December and is actively prototyping and exploring possible services, and in the process of designing the space that will support them.

We are increasingly being asked to support these programs but don’t have the resources or staff.

We provide support/services across schools and departments. We do not currently have a unified (libraries-wide) approach to entrepreneurship support and goals. But a number of stakeholders are interested in doing so.

**Additional comment N=1**

Our liaison librarians support various schools, departments, and populations (undergrads) but are not specifically focused on entrepreneurship efforts within the schools.

**ORGANIZATION OF ENTREPRENEURSHIP ACTIVITIES**

3. **Please identify the institutional units (e.g., faculties, schools, departments, centers, etc.) that offer entrepreneurship activities as described in the introduction. N=57**

As described in the introduction, the institutional unit is the university’s business school.

Asper School of Business, and the Stu Clark Centre for Entrepreneurship. To a lesser degree, the Tech Transfer Office gives support to students, faculty, and staff “entrepreneurs.”

At Boston University (BU), the BuzzLab is the center for entrepreneurship programs and assistance on campus for startup activities by students and alumni. Other services include venture funding and legal assistance through the BU Law Clinic. Other entrepreneurship programs are offered through the Questrom School of Business Executive Education Program's Entrepreneurship Marketing & Finance program and through the Entrepreneurship concentration in the MBA program.

Blackstone LaunchPad, based at Syracuse University Libraries. EBV (Entrepreneurship Bootcamp for Veterans) & EBV-F, offered by IVMF (Institute for Veterans and Military Families). Entrepreneurship & Emerging Enterprises Department, at the Whitman School of Management. Syracuse Student Sandbox. Falcone Center for Entrepreneurship, offered by Whitman School of Management. Newhouse Center for Digital Media Entrepreneurship. Syracuse Center of Excellence. The ICE Box (Innovation, Collaboration, and Entrepreneurship), offered by the School of Information Studies. Falcone Center for Entrepreneurship Couri Hatchery, WISE (Women Ignited in the Spirit of Entrepreneurship), and South Side Innovation Center offered by the Whitman School of Management. Invention Accelerator

Business school

Business, Entrepreneurship & Organizations (BEO) program; Program in Innovation Management and Entrepreneurship (PRIME); Engineering department; Jonathan Nelson Center for Entrepreneurship; Executive Master in Science and Technology Leadership; Executive MBA program; Executive Master in Health Care Leadership; Biotechnology Master and PhD programs; Social Innovation Initiative

Carson College of Business, Voiland College of Engineering, Office of Commercialism

Center for Advancement & Understanding of Social Enterprises (School of Business); Small Enterprise Economic Development (a cooperative effort between School of Business, the School of Social Welfare, the Small Business Development Center, and the State Employees Federal Credit Union); the Entrepreneur-in-Residence Program (through both the Office for Innovation Development and Commercialization & the Small Business Development Center).

Center for Innovation and Entrepreneurship (College of Business); Engineering Education Innovation Center (College of Engineering); Center for Enterprise Transformation and Innovation

Central university-wide Entrepreneurship Office (under the Vice President of Research & Innovation). Course and program level—Business school, Engineering faculty, iSchool, Munk School, Computer Science department, Faculty of Medicine, Management School at satellite campus, Aerospace Department, other faculties and departments. Also: 9 campus accelerators affiliated to faculties/departments with co-curricular programming; Library-based workshops and programming; Student Life and Career Centre workshops and programming; Mobile application development lab, non-official “labs” or incubators such as focused on faith-based startups or social innovations; cross-appointed librarian at local regional innovation centre.

College of Business; Voinovich School of Leadership and Public Affairs; Innovation Center; Center for Entrepreneurship; Technology Transfer Office; Edison Biotechnology Institute

College of Business; College of Computing; College of Design; College of Engineering; residence halls; student club

College of Business, Department of Entrepreneurship; Forcht Center for Entrepreneurship

College of Business, Pappajohn Center for Entrepreneurship. Each college has a faculty member responsible for advising. College of Business is the “home” for the academic programs, but electives are offered in departments across the university.

College of Business, School of Engineering, Transdisciplinary Studies, Knowledge and Tech Transfer Office, Centre for Business and Student Enterprise

College of Engineering, Medical School, School of Information and Literature, Science and the arts

CSU’s College of Business’ Management Department and Institute for Entrepreneurship. CSU Ventures

Duke University’s Trinity College of Arts and Sciences, Pratt School of Engineering, Fuqua School of Business, Medical Center, Law School, Innovation & Entrepreneurship Initiative, Innovation Co-Lab, Duke Global Entrepreneurship Network, Duke’s Office of Licensing & Ventures, Start Up Ventures Clinic, Fuqua School of Business Center for Entrepreneurship and Innovation, Duke Institute for Health Innovation, Nicholas School of the Environment, and Sanford School of Public Policy.

Undergraduate students may choose to study for an Innovation & Entrepreneurship Certificate. Courses for this certificate may be chosen from the following departments or programs: Engineering, Innovation & Entrepreneurship, Program in Arts of the Moving Image, Art, Art History & Visual
Studies, BioMechanical Engineering, Computer Science, Dance, Documentary Studies, Ethics, Finance, History, Markets & Management Studies, Music, Physics, Policy Journalism and Media Studies, Public Policy, Sociology, and Theater Studies. The Fuqua School of Business offers a concentration in Entrepreneurship and Innovation as part of its MBA program. The Concentration in Entrepreneurship and Innovation involves a broad set of electives and includes one course that provides hands-on experience.

E. J. Ourso College of Business (departments and centers listed below): Stephenson Department of Entrepreneurship & Information Systems: Bachelor of Science in Entrepreneurship, degree must be paired with another bachelor's degree from any college on campus as part of a joint-degree; Entrepreneurship Minor; Stephenson Entrepreneurship Institute, Entrepreneurship Fellows Program, Louisiana Business & Technology Center (students: student incubator, venture challenge; public: innovation park, consulting, Small Business Innovation Research, prototyping, tenant space for start-ups). Executive Education: Entrepreneurship Bootcamp for Veterans with Disabilities, LSU100: Fastest Growing Tiger Businesses; Entrepreneurship & Economic Development Committee

EIC: Entrepreneurship and Innovation Academy; Entrepreneurship for Entrepreneurs

Entrepreneurship activities are now unified under the newly expanded Polsky Center for Entrepreneurship and Innovation, which was originally specific to the Booth School of Business. The newly expanded center unified all university entrepreneurial activity and national lab affiliates.

time@UBC, Sauder School of Business, Mitacs

Faculty of Business, Faculty of Sciences and Engineering (entrepreneurial profile), Chair in Entrepreneurship & Innovation, Career Center, Entrepreneuriat Laval (entrepreneurship incubator), Office of Research & Innovation, Student Association in Entrepreneurship, Design School, Faculty of Agriculture.

Goizueta Business School; Office of Technology Transfer

Haslam College of Business Anderson Center for Entrepreneurship & Innovation, UT Research Foundation, Center for Literacy, Education and Employment, Center for Industrial Services


Johns Hopkins University’s Technology Ventures Office (and associated incubators, accelerators, partners, and programs) • Carey Business School • School of Medicine • Whiting School of Engineering • Department of Biomedical Engineering (BME) • Center for Bioengineering Innovation and Design (CBID) • W.P. Carey Program in Entrepreneurship and Management (part of the Center for Leadership Education (CLE), in the Whiting School of Engineering) • Some start-ups and student-run, fee-based consulting businesses affiliated with the university.

Kellogg School of Business Innovation and Entrepreneurship Initiative (KIEI). McCormick School of Engineering Farley Center for Entrepreneurship and Innovation. Medill School of Journalism's Media Innovation and Entrepreneurship Specialization.

Marriott School of Business; Ballard Center for Economic Self-Reliance; Department of Instructional Psychology and Technology; Crocker Innovation Fellowship; Rollings Center for Entrepreneurship and Technology in the Marriott School of Management; Laycock Center for Creative Collaboration; Social Venture Academy; Career Fair for Startups; Start-Up Hub; Entrepreneurship Week (eWeek).

Mays Business School, College of Engineering, Center for New Ventures and Entrepreneurship (CNVE), Engineering Innovation Center (EIC)

McIntire School of Commerce: Galant Center for Entrepreneurship. Darden School: MBA program, Strategy, Ethics, and Entrepreneurship group (SEE), E-Conference, Design Thinking. Batten Institute


New Venture Challenge: The New Venture Challenge (NVC) is CU Boulder’s cross-campus entrepreneurship championship. It is an entrepreneurial flight simulator, giving everyone in the CU Boulder community a chance to explore starting a business while learning about the process through events, workshops, and mentors. Business Minor: In 2013 the Leeds School of Business launched a 12-credit Business Minor so that all CU Boulder students could gain business fundamentals, increasing their immediate impact as new hires. The Business Minor, comprised of entrepreneurship courses available to all CU Boulder undergraduate students regardless of major, is now the largest minor on campus, attracting students from over 60 majors across the university. Entrepreneurship Seed Awards: Entrepreneurship Seed Awards provide support to faculty and staff members seeking funding for projects involving entrepreneurship or a problem-solving mindset. Catalyze CU: Catalyze CU is an 8-week, summer startup accelerator designed for CU students and faculty. Catalyze CU combines world-class mentorship and equity free grants with the university’s most promising ideas and technologies. Global Entrepreneurs In Residence: The Global Entrepreneurs in Residence (GEiR) Program brings international entrepreneurial talent to the CU Boulder campus and community. GEiRs work across the campus, mentoring students in a wide array of projects requiring an entrepreneurial mindset. GEiRs guest lecture in classrooms, advise on entrepreneurial research, and provide mentorship to CU community members developing their own startups.

NuTech Ventures, College of Business Administration, Nebraska Innovation Campus, Institute of Agriculture and Natural Resources, Textiles and Merchandising and Fashion Design, Engineering, etc.

Office of Cooperative Research, Yale Entrepreneurial Institute, Center for Engineering Innovation and Design (based at the School of Engineering), Center for Biomedical Innovation and Technology (based at the School of Medicine), Center for Business and the Environment (based at the School of Forestry and Environmental Studies), InnovateHealth Yale (based at the School of Public Health), and the School of Management Program in Entrepreneurship

Programmatically, The Schulich School of Business has an entrepreneurship program. The Lassonde School of Engineering offers the Bergeron Entrepreneurs in Science & Technology program. Under the umbrella of the Office of the Vice-President Research and Innovation, Innovation York, launched in 2010, provides a focal point for engagement for the York Community for industrial liaison, research commercialization, and entrepreneurship. LaunchYU, a campus-wide initiative that supports early-stage entrepreneurship and helps to accelerate start-up companies within the university and the surrounding community, partners with community organizations like ventureLAB and the York Entrepreneurship Development Institute [in the Schulich Executive Education Centre, a strategic business unit of the Schulich School of Business]. The IP Osgoode Innovation Clinic is offered by the Osgoode Hall Law School and assists start-up companies, entrepreneurs, and inventors with IP-related business issues.

School of Business; Innovate Calgary; Hunter Centre for Entrepreneurship and Innovation; WC21 (health)

School of Business (includes eHub); Faculty of Engineering; TEC Edmonton; Faculty of Science; National Institute of Nanotechnology; Faculty of Agricultural, Life, and Environmental Sciences
School of Business; Office for Research and Innovation, including Innovation Partnership Services, Regional Accelerator & Innovation Network (RAIN), and numerous research centers and institutes

Schools: Rady School of Management, Jacobs School of Engineering, Skaggs School of Pharmacy; School of Global and Policy Studies. Offices: Technology Transfer Office, Campus Career Center’s Alumni Advisor Network. Centers: Rady – California Institute for Innovation and development; Jacobs – von Liebig Entrepreneurism Center and Gordon Engineering Leadership Center; Skaggs – Center for Drug Discovery Innovation. Student Clubs: Entrepreneurship Club (Rady), IdeaConnect (Rady), Pharmaceutical Industry Liaison Loop (Skaggs).

Stern School of Business; Music Business (Steinhardt School of Education); Tandon School of Engineering; Leslie e-Lab

The library; StartupHoyas and the Georgetown Entrepreneurship Initiative (through the Business School)

The Office of Technology Commercialization; the Innovative Network for Entrepreneurial Thinking (INET) in the Communications Department; the Von Allmen Center for Entrepreneurship in the Business College; the Center for Business and Economic Research (CBER) in the Agriculture College.

The university’s Academy for Innovation and Entrepreneurship has the mission of supporting/encouraging innovation and entrepreneurship across the curriculum and engaging all students in this area. The head of the academy is a vice-provost.

There are almost too many of these to mention. Wharton School (business), School of Engineering & Applied Science, Graduate School of Education, Perelman School of Medicine, Penn Center for Innovation (commercialization and entrepreneurship for faculty and staff), Weiss Tech House, Pennovation Works

There are almost too many to list! The university now offers an Entrepreneurship Minor that is open to all students, regardless of their major. So theoretically at least, all colleges offer some form of entrepreneurship activity. The more involved colleges/departments include: Arts & Letters, Business, Communication Arts, Computer Science & Engineering, Horticulture, and Music.

There are many institutional organizations involved in the entrepreneurial experience at Florida State. Listed are the major schools and departments involved in what has been a decentralized process over the last couple of years. During early 2016 a coordinating organization (Executive Director of Jim Moran School and the EIR Council) has begun to lead the university’s charge to develop entrepreneurial thinking across the university.

Jim Moran School of Entrepreneurship (hosted under the Office of the Provost and Academic Affairs)

· JM School/Institute Building and Incubator in Downtown Tallahassee
· InNOLEvation Challenge
· The FSU $1,000 Shark Tank
· Micro Grants
· InNOLEvation Center (co-working space and workshops)
· Round Table, E-Clinic, 7 Under 30, Global Entrepreneurship Month, 1 Million Cups, Women in Entrepreneurship conference
· InNOLEvation Project (special project for student consultants)
· Competitions: Startup Weekend Tallahassee, Governor’s Cup Statewide Business Model Competition, ACC Inventure Competition
· Student Organizations (CEO, DECA ENACTUS (formerly SIFE), Society for Advancement of Management, Young Entrepreneurs Society (YES)) additionally The Office of Entrepreneurship and Innovation is a student run, Student Government funded resource for entrepreneurs on campus.

· Alumni Network

College of Business
· Jim Moran Institute for Global Entrepreneurship
· Small Business Executive Program
· CEO Peer2Peer Groups
· Nonprofit Executive Program
· Jim Moran Institute Business & Leadership Conference
· Advice Straight Up: Expert Speaker Series
· Entrepreneurship Bootcamp for Veterans with Disabilities (EBV) and Entrepreneurship Bootcamp for Veterans’ Families (EBV-F)
· Junior Achievement Big Bend
· Alliance of Entrepreneur Resource Organizations (AERO)

College of Education
· HackEd: Brainstorming Solutions to Issues in Education

College of Engineering
· Technology Entrepreneurship and Commercialization Course
· Pathways to Innovation program (Transform the experience of their undergraduate engineering students and fully incorporate innovation and entrepreneurship into a range of courses as well as strengthen co- and extra-curricular offerings. It is funded by the National Science Foundation and run by Stanford University and Venture Well.)
· Society of Engineering Entrepreneurs (To instill a culture of innovation and entrepreneurship among its members.)

College of Fine Arts (Arts)

College of Human Sciences (Nutrition)

College of Communication and Information
· Hosting the new Innovation Hub space

College of Law
· Entrepreneurial Law Clinic (Law students earn academic credit by helping advise business and social entrepreneurs at Florida State University.)

College of Medicine
· Summer Class on Entrepreneurship (Jim Moran School pays for the faculty member to teach)

College of Music
· Entrepreneurial Residencies in Music (individuals from the business side of music for one-on-one meetings with students)

College of Social Sciences and Public Policy (Stavros Center for Free Enterprise and Economic Education; Devoe Moore Center; Economics)
· Social Entrepreneurship and Innovation Initiative
· Diehl Family Social Enterprise Competition

This is a very long list, and I'm not aware that it's collated anywhere. Top groups that come to mind are: UCLA Anderson School Price Center for Entrepreneurship & Innovation, UCLA Anderson School Technology & Innovation Partners Program, UCLA Business of Science Center, UCLA Entrepreneurship Minor, StartupUCLA, UCLA Invention, etc.

This list is just a very small sample of programs and services that support entrepreneurship experiences and opportunities for participants from any department or discipline on campus. There is no known comprehensive list of such programs and services. • The Office of Technology Management under the Office of the Vice President for Research. (The library has been represented on the OTM Advisory Board.) • Campus Entrepreneurship Roundtable (The library has been represented on this roundtable.) • EnterpriseWorks at the Research Park • Academy for Entrepreneurial Leadership • IllinoisVENTURES • iVenture Accelerator • Innovation LLC • Technology Entrepreneur Center • Illinois Business Consulting • EntreCorps • IDEA Lab at Grainger Engineering Library

Traditional entrepreneurship is taught as part of the curriculum in the business school, the music school, the nursing school, and other areas on campus. Design thinking and innovation is found in pockets throughout the school in many disciplines, although there is no common strategy, approach, or methodology. There is an entrepreneurial center that provides support for student-run businesses, as well as a student-led entrepreneurial club. There is also a student incubator off-campus in collaboration with High Tech Rochester.

Trulaske College of Business; College of Agriculture, Food, & Natural Resources; College of Engineering; MU Student Center; Missouri Innovations Center; MU Extension; Small Business & Technology Development Center (part of MU Extension); Coulter Translational Partnership Program; UM System Entrepreneurial Scholars & Interns Program. I am sure I’m forgetting some. I have not listed individual departments within colleges that offer entrepreneurial enrichment.

UCI ANTrepreneur Center: Dedicated to assisting all UCI students in becoming successful ANTrepreneurs—particularly in the early stages of the startup process—through education, consultation, mentorship, and access to resources. UCI Applied Innovation—The Cove: The “front door” for industry collaboration with UCI. Accelerates appropriate commercialization, technology transfer, public-private partnerships, and social entrepreneurship. A conduit between the Orange County business community and UCI faculty and students. The Beall Center for Innovation and Entrepreneurship: One of the Centers of Excellence within the Paul Merage School of Business. Its mission is to provide education and hands-on opportunities for students to learn about the process of entrepreneurship and innovation first hand. Community & Economic Development Clinic: Part of the UCI Law School. Focuses on housing and homelessness, community, small-business and non-profit development, and policy initiatives designed to improve client communities. UCI Office of Technology Alliances (OTA:) Fosters faculty/industry alliances and commercialization of UC Irvine technology for the broad public benefit. TechPortal Orange: In UCI Medical Center. The first clinically oriented biomedical incubator facility in Southern California. Calit2: A UCI + UCSD multidisciplinary research institute. The goal: to develop innovative information technology-based products and services to benefit society and ignite economic development in the region and state. Beall New Venture Competition: Open to all UCI students, staff, researchers. Offering the opportunity to form a team, create a business plan, and potentially fund a business idea all within six months. (Formerly called the Business Plan Competition). Objectives of the competition are 1) to provide students with a hands-on opportunity to understand, experience, and get involved in the process of launching a business, and 2) to help students achieve their dream by launching startups that are fundable. UCI Technology &
Entrepreneurship Competition: Challenges interdisciplinary teams of graduate students from across UC Irvine to structure and negotiate a joint development agreement for a new and exciting technology. h.ITECH Competition: Designed to foster a spirit of entrepreneurship among Bren School and UCI students, and fuel the development of new technologies that have the potential to positively impact the marketplace. Butterworth Product Development Competition: Open to all UCI students. Designed to encourage the creation of new technologies with potential for commercialization. Students are encouraged to submit new products that involve the development of software and systems. Beall Student Design Competition: Open to all UCI students. Offered to encourage the creation of new technologies, or solutions to current design problems that have the potential for commercialization. Students are encouraged to submit new product ideas that involve the development of hardware and devices. PrimeUC Competition: Competition events (2–4 per year) that award seed funding to the most promising start-ups emerging from the University of California, rotating between life sciences and engineering. Affiliation can include current or alumni students, post-docs, staff, research scientists and faculty, and also includes companies resident in a UC-affiliated incubator.

Velocity; Conrad Business, Entrepreneurship and Technology Centre; Engineering Innovation; St. Paul's Greenhouse; Stratford Digital Media Campus; Entrepreneurship Society (EntSoc); Research Entrepreneurs Accelerating Prosperity (REAP); Waterloo Commercialization Office (WatCo); Accelerator Centre

We have an intercollege minor in entrepreneurship and innovation (with clusters in nine colleges). This minor also has participants from a number of campuses outside the main campus. There are also several centers focusing on innovation and entrepreneurship. The university also has an office of technology management, a business accelerator program, a student-run entrepreneurship organization, and a program that offers training and space for start-ups (a partnership between the university, local government, and companies).

Weatherhead School of Management [Business School]; Case School of Engineering; Thinkbox LaunchPad

Wisconsin School of Business’ Weinert Center for Entrepreneurship (instruction, fellowships, investments). UW Housing (the entrepreneurship residential learning community) Law School (Law & Entrepreneurship Clinic). Discovery to Product (Business & Entrepreneurship and Accelerator program). WARF (technology transfer, public talks, and some funds for technology development). Small Business Development Center (consulting for area start ups and companies). College of Engineering (transcend student organizations that host innovation contests, some curriculum in biomedical engineering on technology development for entrepreneurial settings). UW Arts Institute (sponsors a student organization and a contest for artists). College of Letters and Science (hosts the Computer Science department’s NEST contest). The University INSITE cluster (faculty in the College of Ag and Life Sciences, Law, and Business developing courses, supporting other activities mentioned above). The university’s Office of Corporate Relations (hosts an annual entrepreneurial lifetime achievement award reception, directs queries across campus). Burill Competition. WEB Bootcamp. Discovery to Product Upstart Program (women and minorities). UW-Extension Ideadvance Seed Fund. Wisconsin SBIR -Center for Technology Commercialization. UW Office of Corporate Relations. Technology Transfer Office. UW Extension

Within the School of Management, we have a Center for Entrepreneurial Leadership as well as programs, courses, and labs related to entrepreneurship. Campus-wide there is an undergraduate Entrepreneurship Academy and also Blackstone LaunchPad at UB, a campus-based entrepreneurship program that offers a support system to students, links the campus to the business community, holds events, competitions, etc. Additionally, on a more public facing level, the Office of Economic Development also focuses on engaging entrepreneurs and facilitating entrepreneurial ecosystems.
4. What structure do these units use to organize/coordinate entrepreneurship activities across the institution? N=58

<table>
<thead>
<tr>
<th>Structure</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination is by separate entrepreneurship centers in different faculties/schools</td>
<td>17</td>
<td>29%</td>
</tr>
<tr>
<td>Various stakeholders loosely coordinate activities</td>
<td>12</td>
<td>21%</td>
</tr>
<tr>
<td>Coordination is by a centralized office of entrepreneurship</td>
<td>8</td>
<td>14%</td>
</tr>
<tr>
<td>Coordination extends out from the business school</td>
<td>5</td>
<td>9%</td>
</tr>
<tr>
<td>Coordination is by an advisory board/committee</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Other structure</td>
<td>14</td>
<td>24%</td>
</tr>
</tbody>
</table>

Please briefly describe the other structure. N=14

Coordinated by advisory board, core courses in College of Business, electives offered in departments across the institution and approved by advisory board.

Coordination appears to be by separate centers and entities within schools and within university administration.

Coordination is by separate entrepreneurship centers in different faculties/schools AND by an advisory board/committee. Both are used for coordination of different programs in the varying schools but are tied together by EIR Council and JM School Executive Director.

Coordination is by separate entrepreneurship centers in different faculties/school, with the additional collaboration that has emerged recently where the business school and engineering school have formed a partnership around the engineering school’s entrepreneurship center (von Liebig Center). There is also a nascent entrepreneurship certificate collaboration between the Global Policy & Strategy School and the Technology Transfer Office.

Hopkins takes an approach that is a combination of the above: Coordination is by a centralized office of entrepreneurship: Technology Ventures was created to centralize efforts somewhat and manages the IP and technology commercialization, but the university is still decentralized with separate initiatives being done in East Baltimore to support entrepreneurship. Coordination is by separate entrepreneurship centers in different faculties/schools: We are unaware of separate centers beyond Technology Ventures, but recognize that additional offices at some of the campuses support entrepreneurship activities there. We are unclear of their relationship with Technology Ventures. Coordination is by an advisory board/committee: We think “No” but are not sure what is done at other campuses. Coordination extends out from the business school: Partially. Carey Business School collaborated with Technology Ventures on shared licensing arrangements for particular resources (e.g., Cortellis, ReCap) and the provision of the Entrepreneurship Bootcamp at the university. The Center for Leadership Education, based in the GWC Whiting School of Engineering, sponsors the university’s business plan competition. The business programs plan their own course-related activities and partner with organizations or inventors. Various stakeholders loosely coordinate activities: Yes, for some of these activities.

Our intercollege minor in entrepreneurship and innovation has a faculty member who serves as the director of the minor. However, given the extent of entrepreneurship initiatives at our university, there are many individuals involved in coordinating specific services and events.

Penn has recently implemented a campus-wide Innovation & Entrepreneurship Group that seeks to coordinate efforts that have historically been done by separate entrepreneurship centers in different schools.

Research foundation/tech transfer department
Some in centralized office, some in faculties/schools

The Blackstone LaunchPad has established a monthly meeting of a cross-campus Entrepreneurship Roundtable (E-Table), a 45-member group of faculty and staff engaged with entrepreneurship. Representatives include faculty who teach courses in entrepreneurship and program staff who work with entrepreneurially minded students. The focus of each meeting is outreach, information sharing, collaborative event planning, and support for cross-campus entrepreneurial activities.

The BuzzLab is the centralized office for entrepreneurship.

The Innovation and Entrepreneurship Initiative coordinates some of the activities on campus and is a centralized office for its programs. In addition, the professional schools and their centers coordinate their activities. These are not loosely coordinated as each stakeholder has constituents and objectives for its activities and outreach.

The various entrepreneurial entities and stakeholders are certainly aware of one another, but basically it's a free-for-all.

There is no known formalized coordination between these entities, or any others unlisted. The Office of the Vice President for Research offers programs and incentives for entrepreneurial ideas, but that office does not oversee or coordinate the courses and programs with which librarians work. Librarians actually do not offer targeted services or collections to OVPR entities or to the Research Park.

5. Does your library play a role in directing or coordinating campus entrepreneurship activities?
   N=58

   Yes 14 24%
   No 44 76%

   If yes, please indicate what that role is. N=14

   Member of a governing body/advisory board/committee 3 21%
   Input at the faculty/department level 2 14%
   Input at the senior management level, e.g., deans' council 0 —
   Other role 9 64%

   Please briefly describe the other role. N=9

   Associate Dean is on the I&E SGA and will be leading the development of the Innovation Cluster Space in the library. Also is a co-chair of subcommittee related to the Innovation Ecosystem across the university.

   Member of governing body/advisory board/committee: not a member yet, but probably later this year.

   Provide liaison support like help with information seeking, classroom training or teaching, consultations, acquiring resources. Center for Entrepreneurship and Innovate Blue are located in the libraries.

   The Blackstone LaunchPad, based in the SU Libraries, facilitates a cross-campus Entrepreneurship Roundtable (E-Table).

   The business and economics librarian serves on the advisory committee.
The library offers a space for interdisciplinary courses on social innovation. Librarians are part of the steering committee from other departments across campus. We are also connected to a curriculum committee. The Marriott School’s Rollins Center for Entrepreneurship and Technology website has a direct link to the Entrepreneurship Library guide.

The library’s Maker Hub has become a magnet for entrepreneurship activities. We are often invited and involved with on-campus discussions about entrepreneurship, but there is not necessarily a formal group coordinating all of these activities across campus.

The Patent and Trademark Resource Centers Program (PTRCP) administers a nationwide network of public, state, and academic libraries designated as Patent and Trademark Resource Centers authorized by 35 USC 12 to disseminate patent and trademark information and support diverse intellectual property needs of the public. The PTRC in the Science and Engineering Library provides primary support for patent and trademark searching and makes referrals to Technology Transfer Office (TTO) when appropriate.

We are just beginning to forge a role in the “pre-incubator,” skills development, idea generation, match-making, and awareness spaces. We will be increasing our leadership role in this area over the next few years.

6. Is there a policy, service-level agreement (SLA), or memorandum of understanding (MOU) with any of the institutional units that describes the ways in which the library supports entrepreneurship activities? N=58

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>57</td>
</tr>
</tbody>
</table>

LIBRARY STAFF SUPPORT FOR ENTREPRENEURSHIP

7. Has the library created any staff position that has primary responsibility for managing/Coordinating library services that support entrepreneurship activities? N=58

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td>Not yet, but we plan to</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>37</td>
</tr>
<tr>
<td>No, and we don’t plan to</td>
<td>6</td>
</tr>
</tbody>
</table>

If yes, please provide the following information about that position. N=12

<table>
<thead>
<tr>
<th>Position title:</th>
<th>Assistant Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library unit/department:</td>
<td>Lippincott Library (business library)</td>
</tr>
<tr>
<td>Reports to:</td>
<td>Director, Lippincott Library</td>
</tr>
<tr>
<td>Percentage of time devoted to entrepreneurship:</td>
<td>30</td>
</tr>
<tr>
<td>Year position created:</td>
<td>2017</td>
</tr>
</tbody>
</table>

Comments: This is not a new position itself, but we took the opportunity of the position being open to rework and revise it to include a strong entrepreneurship focus.
<table>
<thead>
<tr>
<th>Position title:</th>
<th>Library unit/department:</th>
<th>Reports to:</th>
<th>Percentage of time devoted to entrepreneurship:</th>
<th>Year position created:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>iZone</td>
<td>Dean of Libraries</td>
<td>100</td>
<td>2017</td>
</tr>
<tr>
<td>Economics &amp; Business Librarian</td>
<td>Academic Liaison Program</td>
<td>Library</td>
<td>Approximately 20</td>
<td>2006</td>
</tr>
<tr>
<td>Engineering &amp; Entrepreneurship liaison librarian</td>
<td>Davis Information Services &amp; Resources</td>
<td>Head, Davis Information Services &amp; Resources</td>
<td>35% (on average)</td>
<td>Entrepreneurship specialization added in 2014</td>
</tr>
<tr>
<td>Entrepreneurial Outreach Librarian</td>
<td>University Libraries, Strozier Library, Scholars Commons</td>
<td>Research and Learning Services (RLS)</td>
<td>60</td>
<td>2014</td>
</tr>
</tbody>
</table>

Comments: Entrepreneur-In-Residence staff of the library is titled the Entrepreneurial Outreach Librarian. It is part of the Research and Learning Services (RLS) division, Scholars Commons Area. The EOL reports to the Director of Scholars Commons. Approximately 60% of time is devoted to entrepreneurship and balance to business school. The position was created in spring 2014 and rolled out over the summer 2014 semester.

<table>
<thead>
<tr>
<th>Position title:</th>
<th>Library unit/department:</th>
<th>Reports to:</th>
<th>Percentage of time devoted to entrepreneurship:</th>
<th>Year position created:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship Librarian</td>
<td>Gast Business Library</td>
<td>Head of the Gast Business Library</td>
<td>100% (75% entrepreneurship liaison; 25% makerspace coordinator)</td>
<td>2013</td>
</tr>
<tr>
<td>Entrepreneurship Librarian</td>
<td>Schreyer Business Library</td>
<td>Head of the Schreyer Business Library</td>
<td>90</td>
<td>2017</td>
</tr>
</tbody>
</table>

Comments: We are in the process of hiring an Entrepreneurship Librarian. The search is underway.
<table>
<thead>
<tr>
<th>Position title</th>
<th>Entrepreneurship Librarian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library unit/department</td>
<td>Gerstein Science Information Centre</td>
</tr>
<tr>
<td>Reports to:</td>
<td>Assistant director, Gerstein Science Innovation Centre</td>
</tr>
<tr>
<td>Percentage of time devoted to</td>
<td>100</td>
</tr>
<tr>
<td>entrepreneurship:</td>
<td></td>
</tr>
<tr>
<td>Year position created:</td>
<td>2015</td>
</tr>
</tbody>
</table>

Comments: functional specialist role

<table>
<thead>
<tr>
<th>Position title</th>
<th>Executive Director of the Blackstone LaunchPad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library unit/department</td>
<td>Blackstone LaunchPad</td>
</tr>
<tr>
<td>Reports to:</td>
<td>Blackstone PI and Dean of Libraries and University Librarian</td>
</tr>
<tr>
<td>Percentage of time devoted to</td>
<td>100</td>
</tr>
<tr>
<td>entrepreneurship:</td>
<td></td>
</tr>
<tr>
<td>Year position created:</td>
<td>2016</td>
</tr>
</tbody>
</table>

Comments: Key responsibilities/duties: Establish strategy, manage operations, build partnerships and cross campus relationships that grow the pipeline, coach and mentor (individually, through team meetings, and workshops and training programs). Work with SU communications to create and disseminate success stories.

<table>
<thead>
<tr>
<th>Position title</th>
<th>Fusion Studio Manager &amp; Learning Space Assessment Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library unit/department</td>
<td>Learning Environments</td>
</tr>
<tr>
<td>Reports to:</td>
<td>Associate Director, Learning Environments</td>
</tr>
<tr>
<td>Percentage of time devoted to</td>
<td>60</td>
</tr>
<tr>
<td>entrepreneurship:</td>
<td></td>
</tr>
<tr>
<td>Year position created:</td>
<td>2016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position title</th>
<th>Maker Hub Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library unit/department</td>
<td>Gelardin New Media Center</td>
</tr>
<tr>
<td>Reports to:</td>
<td>Head, Gelardin New Media Center</td>
</tr>
<tr>
<td>Percentage of time devoted to</td>
<td>100</td>
</tr>
<tr>
<td>entrepreneurship:</td>
<td></td>
</tr>
<tr>
<td>Year position created:</td>
<td>2016</td>
</tr>
</tbody>
</table>

Comments: The Maker Hub manager is a 30 hr/week (.75 FTE) position. Supporting entrepreneurship is a key responsibility of this role, but no formal designation of “time spent on entrepreneurship” is indicated.

<table>
<thead>
<tr>
<th>Position title</th>
<th>Patent &amp; Trademark Resource Center (PRTC) Librarian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library unit/department</td>
<td>Science and Engineering Library</td>
</tr>
<tr>
<td>Reports to:</td>
<td>PRTC Program Director at the USPTO and Head, Science &amp; Engineering Library</td>
</tr>
<tr>
<td>Percentage of time devoted to</td>
<td>20</td>
</tr>
<tr>
<td>entrepreneurship:</td>
<td></td>
</tr>
<tr>
<td>Year position created:</td>
<td>2009</td>
</tr>
</tbody>
</table>

Comments: Year created: 2009 (although I am not the first librarian to take on this position, which was created when UMass Amherst became a PRTC in 1984.)
Additional Comments N=7

Answered Not yet, but we plan to N=2

There is discussion to create an entrepreneurship librarian that primarily would support the Engineering and Business School’s entrepreneurship activities. The specifics of the position and funding are still being discussed.

This work has been done via the Management Library at the business school.

Answered No N=5

At this time, no such position appears on any hiring plan in the library.
Primary responsibility for entrepreneurship activities falls to the Business and Economics Librarian, who also serves on the advisory board.

The library does house the student researcher position (described above), which is funded by the Kentucky Small Business Development Center.

There has been talk about having an entrepreneurship librarian and a business librarian, but with the current budget, I don’t see that happening.

We do have a proposal for a liaison position to support cross-disciplinary programs and centers for excellence. Most of these have elements of entrepreneurship in their curricula.

8. Has the library created any other staff position (different from above) specifically to support entrepreneurship activities? N=57

<table>
<thead>
<tr>
<th>Yes</th>
<th>4</th>
<th>7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not yet, but we plan to</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>79%</td>
</tr>
<tr>
<td>No, and we don’t plan to</td>
<td>7</td>
<td>12%</td>
</tr>
</tbody>
</table>

If yes, please provide the following information about that position. N=4

<table>
<thead>
<tr>
<th>Position title:</th>
<th>Community Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library unit/department:</td>
<td>iZone</td>
</tr>
<tr>
<td>Reports to:</td>
<td>Director, iZone</td>
</tr>
<tr>
<td>Percentage of time devoted to entrepreneurship:</td>
<td>100</td>
</tr>
<tr>
<td>Year position created:</td>
<td>2017 (hiring currently)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position title:</th>
<th>two Engineering/Science Librarian positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library unit/department:</td>
<td>Engineering and Life Sciences Library</td>
</tr>
<tr>
<td>Reports to:</td>
<td>Director of Science &amp; Engineering Libraries</td>
</tr>
<tr>
<td>Percentage of time devoted to entrepreneurship:</td>
<td>20% (patent support) in Engineering Library and 5% in Life Science Library</td>
</tr>
<tr>
<td>Year position created:</td>
<td>2016</td>
</tr>
</tbody>
</table>
Position title: Manager, 3D Design Studio  
Library unit/department: Learning Environments  
Reports to: Associate Director, Learning Environments  
Percentage of time devoted to entrepreneurship: 80  
Year position created: 2016

Position title: Program Manager of the Blackstone LaunchPad  
Library unit/department: Blackstone LaunchPad  
Reports to: Blackstone PI and Dean of Libraries and University Librarian  
Percentage of time devoted to entrepreneurship: 100  
Year position created: 2016

9. Please briefly describe which other library staff typically provide support/services to campus entrepreneurship activities. N=43

All Gelardin New Media Center staff, student workers, and our Business Librarian support entrepreneurship activities.

All of the business librarians support entrepreneurship projects through consultations. One librarian takes the lead on creating guides and liaising with the business school on entrepreneurship-related courses and projects. It is likely we will continue with this model unless the university establishes entrepreneurship as a key strategic theme and provides resources to expand library services in this area.

Business & Engineering Librarians, Digital Scholarship Librarians
Business Librarian, Statistics Librarian
Business librarian for programs generally coordinated out of the College of Business. Science librarians for the Edison Biotechnology Institute
Business Librarian is currently the only library staff member providing support and services to entrepreneurship activities.

Business librarians, engineering librarians, patents and trademark librarian, copyright officer, and campus librarians outside main campus who support entrepreneurship curriculum and initiatives.

Business library staff, liaison librarians in various disciplines

Business Library, Engineering Library, Steenbock (Life Sciences) Library, Law Library. Engineering librarians participate in instruction and research guide creation for design classes and patents. Chemistry librarian also provides patent support. Agriculture & life sciences librarians have assisted community patrons with business research. Business librarians provide support via instruction in various courses on entrepreneurship, venture creation, and small business management classes. The Business Library also creates LibGuides that focus on various entrepreneurship topics. The Business Library also supports students in various business plan competitions. The Business Library assists community patrons via the Small Business Development Center in finding information for their business plan. The Business Library through various means provides information resource support for the following entrepreneurship organizations that are on campus: Wisconsin School of Business’ Weinert Center for Entrepreneurship (instruction, fellowships, investments); UW Housing (the entrepreneurship residential learning community); Law School (Law & Entrepreneurship Clinic);
Discovery to Product (Business & Entrepreneurship and Accelerator program); WARF (technology transfer, public talks, and some funds for technology development); Small Business Development Center (consulting for area start ups and companies); College of Engineering (transcend student organizations that host innovation contests, some curriculum in biomedical engineering on technology development for entrepreneurial settings); UW Arts Institute (sponsors a student organization and a contest for artists); College of Letters and Science (hosts the Computer Science department’s NEST contest); The University INSITE cluster (faculty in the College of Ag and Life Sciences, Law, and Business developing courses, supporting other activities mentioned above); The university’s Office of Corporate Relations (hosts an annual entrepreneurial lifetime achievement award reception, directs queries across campus); Burill Competition; WEB Bootcamp; Discovery to Product Upstart Program (women and minorities); UW-Extension Ideadvance Seed Fund; Wisconsin SBIR - Center for Technology Commercialization. Law Library supports the Law and Entrepreneurship Clinic.

Data/GIS Librarians, Business Librarians, stats analysts, etc.

Digital Media Lab staff provide support like 3D printing for engineering entrepreneurship activities, and its prototyping and lynda.com licenses that are popular with entrepreneurship students from across campus. Various subject specialists provide ad hoc support for entrepreneurship activities and consult with the business librarian about it. The engineering librarian provides workshops on patent searching co-advertised to the business school. The business school is considering having the data librarian provide a one-shot seminar in the MBA professional development lecture series during upcoming academic year. The data librarian provides data manipulation workshops that are co-advertised at the business school. The pharmacology librarian advertises the business librarian’s drop-in consultations to the pharma commercialization capstone class. Business librarian has provided one-shot instruction on entrepreneurship and career resources to an engineering student club and campus career center events.

Duke Libraries’ Librarian for Engineering, Librarian for Markets and Management Studies, librarians in the Data & Visualizations department and staff in Digital Scholarship Services; Ford Library’s Associate Director & Manager of Public Services and Associate Director & Manager of IT Services; and, upon request, librarians in the Goodson Law Library and Medical Center Library.

Liaison librarian for accounting, finance, and economics; Associate University Librarian, Information Resources and Academic Excellence. Our liaison librarians share a job description. For our liaison librarians who also have taken on specializations such as entrepreneurship, we articulate the scope of the specialization but do not put it in the job description. Below is the description for the entrepreneurship specialization. Entrepreneurship specialization: The entrepreneurship specialization supports a diverse community of stakeholders across campus, including BET, St. Paul’s Greenhouse, the many variations of Velocity, student entrepreneurship organizations, etc. Primary responsibilities of this specialization involve promoting the library’s support for entrepreneurship to these communities and one-on-one consultations. This position works closely with the librarian for accounting, finance, and economics. Additional skills/assets and areas of growth associated with this specialization have been identified as knowledge of engineering /STEM terminology/resources; an understanding of standards and patents and the role they play in both research and industry; awareness of the engineering design process; knowledge of subscription business databases; knowledge of key news resources, both current and historical.

Liaison librarians and other librarians as the need arises. Makerspace program staff, including the Emerging Technology Services Librarian, provide rapid prototyping services and teaching and learning opportunities around prototyping tools and methods.
Librarian for Business, Management, and Entrepreneurship (formerly Business and Management Librarian, title changed in 2016, although entrepreneurship support has been ongoing throughout the years at an estimated 80% percentage of time devoted to entrepreneurship.) Collection Development and Analysis Librarian (formerly held title of Bibliographer) who oversees the budget for business research resources. Several interns who work for the Blackstone LaunchPad.

Librarians, staff at reference desks, community engagement librarian

Patents librarian, business librarian

Primarily business librarians provide support for entrepreneurial activities but on occasion referrals may be made to other subject librarians, such as the engineering librarian for patent searching.

Reference and Information Services staff, including librarians and library assistants

Several of our newer positions support entrepreneurship/entrepreneurs in some way but were not specifically created for this purpose. These include full-time staff positions at Make Central (hosted in the Main Library), a GIS librarian, and a data librarian.

Social Science Librarian for Business supports entrepreneurship activities in the School of Business.

Support for entrepreneurship is provided by a team of librarians: the Librarian for Business & Management, the Librarian for Forestry & Environmental Studies, the Engineering Librarian, the GIS Librarian, and the Public Health Librarian. A team-based approach works well with the diffuse and multidisciplinary nature of entrepreneurship on our campus. These librarians contribute essential subject expertise, and as liaisons, they are able to make connections with entrepreneurship centers and programs in a variety of schools and departments.

The Business & Economics Librarian for Instruction & Outreach is a mentor at the incubator (the Polsky Exchange). She holds office hours there to help members define their target markets through consumer demographics and market research. She also helps them define their competition using company information and industry analysis.

The business liaison librarian supports the College of Business, including entrepreneurship activities, and other staff in the library support library facilities for 3D printing and multimedia production, which have been used for entrepreneurship-focused projects. Liaisons across the Libraries' provide research assistance and resources to support the creation of entrepreneurial projects and products across disciplines as needed.

The business librarian and two engineering liaison librarians have supported entrepreneurship through their liaison work with their college-affiliated entrepreneurship centers. We do not have a dedicated position for entrepreneurship.

The business librarian has lead training sessions for the student researchers in the Office of Technology Commercialization. He has met with students who are participating in entrepreneurial activities.

The business librarian provides assistance as part of her liaison work with the College of Business and in providing business information/research consultations to the campus community.

The business librarian supports student entrepreneurs and entrepreneurial public patrons. The business librarian also supports the Entrepreneurship Bootcamp for Veterans with Disabilities.

The business librarians have a long-standing relationship with the Entrepreneurship Center located in the B-School, offering classes and providing support for various competitions. As entrepreneurship has exploded on campus we have expanded our support to include the business support staff who create online tools for use by any entrepreneurship class or program regardless of school.
The engineering, business, regional, and GIS & data librarians from the Sheridan Libraries; the Reserves coordinators for the JHU libraries; the “informationists” at the medical and public health libraries; the librarians at the Applied Physics Lab

The library has a Patent and Trademark Resource Center, which provides support to faculty and students in entrepreneurship and design classes, and also provides support to the Technology Development Center. We collaborated on jointly purchasing 3D printers for use in an entrepreneurship class and these printers reside in the library’s Creative Studios where they are open to the entire campus. We also provided instruction and student support during the duration of the class. The staff who oversee the studios are also responsible for the printer maintenance, training, and overall coordination of use by the campus community. In addition, we collaborate on events such as career fairs and Startup Weekend where students work intensively to design and market an original product with the assistance of local business owners and resources.

The library staff is skilled in facilitating collaboration and inquiry and will support iZone as it evolves.

The social sciences librarian, social sciences data librarian, and engineering librarian all help students as much as possible, given time constraints and lack of resources.

The veterinary medicine librarian provides a lot of support, as do the health sciences and journalism librarians.

There are many librarians who provide support via project consultation in the business and STEM libraries. We also have 3D printing services that are used for prototyping that are run by librarians and interns.

This is handled via the business research librarians at the Management Library.

Three business subject specialist librarians (faculty) and a staff member primarily support the courses and co/extra-curricular programs related to entrepreneurship, in addition to their other responsibilities. As part of this support, librarians and staff members from subject specializations such as engineering, life sciences, and law, as well as functional areas such as our scholarly commons, may be included in the library’s response, depending on the nature of the request and discipline(s) involved.

Through liaison roles with various faculties and departments, supporting courses, collaborating with entrepreneurship librarian. Also cross-appointed U of T librarian embedded in local regional innovation centre.

Two business librarians teach, consult on capstone projects (industry clients), and liaise with engineering librarian.

UCI’s Business & Economics Librarian offers tailored research workshops on request, and offers reference support to anyone in the greater UCI community with a business-related research question. By logical extension, this means supporting anyone participating in UCI’s entrepreneurial ecosystem.

Various library subject specialists have worked with their college or department’s entrepreneurial activities all with varying degrees of involvement. The most active have been the business librarians, but the music librarians and the arts librarian have had active faculty and students in entrepreneurship. The Entrepreneurial Outreach Librarian works with any library subject specialist to answer questions and provide outreach when requested.

We do not have anyone dedicated entirely to managing library support for entrepreneurial programs. We do have two business librarians who jointly manage this as part of their regular liaison responsibilities.

We rely on our liaison librarian for business to interact and respond to any needs.
LIBRARY RESOURCES FOR ENTREPRENEURSHIP

10. Please indicate which kinds of resources the library has purchased or licensed specifically to support entrepreneurship activities. Check all that apply. N=55

<table>
<thead>
<tr>
<th>Resource</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>47</td>
<td>86%</td>
</tr>
<tr>
<td>Specialized databases (for market research, patents)</td>
<td>43</td>
<td>78%</td>
</tr>
<tr>
<td>Reference material (directories, business plans)</td>
<td>39</td>
<td>71%</td>
</tr>
<tr>
<td>Periodicals (trade publications, journals, newspapers)</td>
<td>38</td>
<td>69%</td>
</tr>
<tr>
<td>Data and statistics</td>
<td>29</td>
<td>53%</td>
</tr>
<tr>
<td>Specialized software (Bloomberg, data visualization, etc.)</td>
<td>26</td>
<td>47%</td>
</tr>
<tr>
<td>Specialized equipment (audio/visual, computers, maker hardware, etc.)</td>
<td>19</td>
<td>35%</td>
</tr>
<tr>
<td>Other resource</td>
<td>17</td>
<td>31%</td>
</tr>
</tbody>
</table>

Please briefly describe the other resource. N=17

All of the above have been purchased by the library, but not “specifically to support entrepreneurship activities.” Answers to the questions below are for resources that support entrepreneurship, regardless of whether they were purchased specifically for that purpose.

Among many others: Audit Analytics, Mergent Intellect, LexisNexis Academic, Mergent Online, Factiva, Wharton Research Data Services (WRDS), Bloomberg, Privco, IBIS World, MarketLine, Statista, Mintel Reports, MarketResearch.com

DVDs and streaming video

Market research resources were purchased specifically to support entrepreneurship activities but they are broadly used by the campus community. Entrepreneurship programs were developed in part based on the strength of the existing library collections.

Other: Online appointment booking tool for the Business & Economics Librarian.

Our library actually offers many of these resources (specialized databases, periodicals, books, data and statistics, reference material, specialized software) but none of it was purchased specifically to support entrepreneurship activities. Rather, it was purchased for use by researchers (faculty and students, for course-based or other activities), and access has been extended to some co/extra-curricular programs.

Our movie production software, laser cutter, 3D printer could all be used for entrepreneurship activities, but they are also used for other purposes. The same is true for our databases and collections. Nothing new has been purchased expressly for the purpose of supporting entrepreneurship.

Our responses in this section refer only to resources acquired specifically to support entrepreneurship. We are not including the databases, data sets, equipment, software, etc. that were acquired/licensed for other purposes or groups of users that may also be used for entrepreneurship activities.

The library had purchased several databases for supporting entrepreneurial activities. A small budget has been established and the Entrepreneurial Outreach Librarian works hard to partner with departments that can make use of market research tools in addition to the Jim Moran School of Entrepreneurship. For instance many of the market research databases are useful to the STEM departments as they make bids for NSF and other governmental grants. The Office of Research, Office of Commercialization, and Office of Proposal Development make use of the market research databases and tools for their clients.
The library has access to US Patent and Trademark Office database, materials, and support.

To the extent that purchases for the School of Business support entrepreneurship, we purchase these items. We also have a new MakerSpace, which is not specifically designed to promote entrepreneurship but likely does so.

Video content from lynda.com and Kanopy

We don't purchase or subscribe specifically for entrepreneurship, but for academic use. However, in our interdisciplinary environment materials may support teaching interest in exploring the end product of entrepreneurship, e.g., BCC Research was subscribed to in order to support an engineering course in entrepreneurship.

We have many of these resources that would support entrepreneurship activities, but they were not specifically purchased for just those activities. These resources would be purchased out of a variety of sources, including general library funds, foundation, and research. Resources would be available to faculty, students, staff, and onsite patrons.

We have not purchased any resources specifically to support entrepreneurship activities. We have many resources that can be used for both academic and entrepreneurial activities.

We have purchased all of these, but none specifically to support entrepreneurship activities.

We have purchased resources that are used by entrepreneurs, but were not specifically purchased for their use—books, reference materials, and databases. The items were purchased for academic use.

11. What are the sources of funds to purchase these resources? Check all that apply. N=53

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>Books, journals, databases</th>
<th>Data</th>
<th>Equipment</th>
<th>Software</th>
<th>Other resource</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main library general budget</td>
<td>48</td>
<td>29</td>
<td>18</td>
<td>23</td>
<td>6</td>
<td>51</td>
</tr>
<tr>
<td>Business library budget</td>
<td>20</td>
<td>14</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Another branch/unit library budget</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Academic department/unit budget</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Endowment fund</td>
<td>10</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Grants</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Gift fund</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Separate budget for entrepreneurship support</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Other source of funds</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Total responses</td>
<td>53</td>
<td>36</td>
<td>27</td>
<td>30</td>
<td>12</td>
<td>53</td>
</tr>
</tbody>
</table>

If you selected “Other source of funds” above, please briefly describe the source and identify the type of resource. N=9

An online appointment booking tool is paid from the reference department funds, a subset of the Main Library general budget.

Educational and technology fees (equipment)

Main library budget and business school funds (all types of resources)

The Blackstone Foundation provides funds for construction of space within Libraries, furnishings, and other equipment.
The business library receives funds from the Small Business Development Center as well as the Entrepreneurship Learning Community for resource support.

The business school contributes some funds.

The main funds come from the University Libraries main budget. However, several colleges have put in money for various resources to help purchase different databases and data tools mainly. For example the College of Business database funds several different databases, the Law Libraries also helps out with various databases, and the award-winning Career Center Library purchases different databases and cooperatively purchases with University Libraries.

The patent database and materials we receive are provided free of charge by the US government because we are a depository library. The main library budget supports databases used for business classes. The other sources of funds are endowed funds.

We have a library student technology fee that supports equipment and software purchases.

12. Where are these resources located? Check all that apply. N=53

<table>
<thead>
<tr>
<th>Location</th>
<th>Books, journals, databases</th>
<th>Data</th>
<th>Equipment</th>
<th>Software</th>
<th>Other resource</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main campus library</td>
<td>47</td>
<td>24</td>
<td>16</td>
<td>21</td>
<td>5</td>
<td>47</td>
</tr>
<tr>
<td>Online</td>
<td>47</td>
<td>33</td>
<td>5</td>
<td>17</td>
<td>7</td>
<td>47</td>
</tr>
<tr>
<td>Another branch/unit library</td>
<td>22</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Business library</td>
<td>19</td>
<td>12</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Entrepreneurship center</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Incubator</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Other location</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Total responses</td>
<td>53</td>
<td>36</td>
<td>24</td>
<td>29</td>
<td>11</td>
<td>53</td>
</tr>
</tbody>
</table>

If you selected “Another branch/unit library” above, please specify which library and identify the type of resource. N=23

3D printing is located in the Science & Technology Library.

All branches: books, journals, databases

All databases, ebooks, and ejournals are accessible in all BU libraries, including branch libraries of Mugar Library, and in faculty libraries: law, medical, and theology. Resources are also available on campus in all buildings, offices, and centers.

Art, Architecture, and Engineering library buys books to support the curriculum for CFE located on that campus. Online access is supported all around campus at every campus library on a walk-in basis.

Ayala Science Library: 3D printer and poster printer

Career Center Library: databases

Center for Science and Social Science Information (merged science/social science/data library)

Engineering Library

Engineering Library: makerspace with specialized software and 3D printer

Engineering Library: books
Fine Arts Library: computers and software, materials & data archive. Robertson Media Lab: Recording, computers & software; materials & data archive, 3D scanning, drones. Library Data Commons at Curry: computers & software; material & data archive.

Jack Brause Library (real estate); Dibner Library (engineering); NYU-Abu Dhabi Library

Journalism Library subscribes to two databases (market research).

Main campus library. For the few instances where the business school pays a portion, the library is still responsible for payment and managing the resources.

Our engineering library offers software and equipment in its IDEA Lab. Our scholarly commons offers databases, datasets, and software.

Pendergrass Ag Vet Med Library, Music Library: all resources

Science and Engineering Library: reference materials

Separate resources may have been acquired by the Welch Medical Library, the SAIS library, or the Applied Physics Lab library for their populations. Some of them may be restricted to or licensed specifically for those populations. Most of the resource categories mentioned could apply.

STEM library has all.

The Research Commons will host data sets that may be used for academic-related entrepreneurship. Electronic books/databases/journals would be accessible via both the main library and the Research Commons and online. There is some specialized software (visualization and GIS related) located in the Research Commons that could be used for entrepreneurial purposes.

The science library has its own materials, equipment, data, and software that our community may access.

UBC Okanagan campus library

We have 44 libraries and resources are spread across various locations, including but not limited to the medical science library and the engineering and computer science library.

If you selected “Other location” above, please briefly describe the location and identify the type of resource. N=12

Campus libraries (these are in locations other than the main campus); books, DVDs

Career Center Library is located 10 minutes walk from College of Business/Strozier Library to access databases.

Central data storage

Darden IILab; Rolls Royce Rapid Prototype Lab; Mechatronic Lab & The Mill; Mech machine Shop; Ann Warrick Lacy Center; Reactor Shop/OMERF; Rice Hall 120; Drama Scene & Props Shop; Studio Art Sculpture Shop; A School Fab; BME Fabrication Space; Wilson Media & Maker Studio.

LITS (Library & Information Technology Services) has a 3D printer in the student computing center, which is in a separate building from the main library.

Makerspaces within Main Libraries

Most resources, except software, are accessible from off campus.

Offsite storage facility

Other = online. Most of what we have is not located anywhere. Entrepreneurial work is usually not done with physical materials.
Our college of business offers a “trading lab” with software resources such as Bloomberg and Capital IQ.

Our IdeaLab includes a space with tables, white boards, and large monitors to promote collaborative innovation.

Research foundation or tech transfer department

13. **Who may use these library resources? Check all that apply.** N=53

<table>
<thead>
<tr>
<th>User category</th>
<th>Books, journals, databases</th>
<th>Data</th>
<th>Equipment</th>
<th>Software</th>
<th>Other resource</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>53</td>
<td>37</td>
<td>26</td>
<td>31</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>Faculty</td>
<td>53</td>
<td>37</td>
<td>26</td>
<td>31</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>Staff</td>
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<td>36</td>
<td>25</td>
<td>30</td>
<td>8</td>
<td>53</td>
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<tr>
<td>General public</td>
<td>37</td>
<td>15</td>
<td>9</td>
<td>7</td>
<td>4</td>
<td>38</td>
</tr>
<tr>
<td>Alumni</td>
<td>36</td>
<td>16</td>
<td>10</td>
<td>9</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>Members of the business community, entrepreneurs, etc.</td>
<td>35</td>
<td>13</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>Other user category</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Total responses</td>
<td>53</td>
<td>37</td>
<td>26</td>
<td>31</td>
<td>8</td>
<td>53</td>
</tr>
</tbody>
</table>

If you selected “Other user category” above, please briefly describe the user and identify the type of resource. N=10

Alumni, general public, members of the business community, entrepreneurs, and others can only use databases for non-business purposes.

Alumni, public, business community, and others through walk-in/guest pass access only.

Anyone who brings their own device (such as a laptop) to the university can sign up instantly online for guest wifi access. This guest wifi access enables them to connect with and use many of the business research databases. As to the physical materials, the Libraries is open to the public and anyone may enter and browse and read items from the stacks.

Inventors: books; databases [and journal articles via databases]. Artists: books; databases [and journal articles via databases]

Our institution is public, so technically anyone can use a computer onsite to access most of our electronic resources. Remote access is for current students/faculty/staff.

Resources can be accessed while in the library by members of the Polsky Exchange, as well as members of the general public once they go through the process of requesting permission to visit the library.

There are some limits on general public use: specific finance, marketing, and GIS databases do not allow walk-in access. Public use is walk-in access only. Alumni may use if they are part of the walk-in public.

We are a selective federal depository library, so we provide public walk-in access to federal business and economic data.

This would apply to our walk-in patrons. Alumni and other visitors who enter the library may access most electronic resources through a temporary login/password for non-commercial use, but some resources will be restricted to the current affiliates. Other licenses allow walk-ins. Members of the business community who are walk-ins could use most resources to do research for technologies that
aren't yet commercialized or licensed but would not be authorized to use many electronic resources for commercial or for-profit purposes. The library doesn't monitor patrons' use of resources but will educate users on licensing terms as needed.

Users who are not university students, faculty, or staff may use library content on-site. License agreements restrict use beyond those groups. We are not yet prepared to offer MakerSpace and Visualization Lab resources available beyond our primary clientele.

Walk-in access is available to all users; remote access is limited to affiliated faculty, students, and staff.

**Additional comments N=13**

All user types can access our print reference material and books, however, database access is more restricted and limited to current students, faculty, and staff.

Alumni and the general public (including members of the business community) can obtain a guest pass to sign on to computers in the Libraries, which allows them to use our electronic resources. This is designed for educational purposes only.

Alumni have access on-site to various resources but not the full suite of services/databases available to a current student.

Alumni, general public, and members of the business community may all use the resources when visiting the on-campus facilities.

Community and general public may use resources when they visit the library buildings.

For alumni, the public, etc. It varies by resource. Some resources are available to the public on site.

General public, alumni, and members of the business community must use resources on site and subject to license restrictions.

Our resources are available for in-library use by the general public and alumni.

Some databases allow walk-in use.

Some restrictions apply to alumni access and for walk-in users.

Students, faculty, and staff can use the online materials off-campus. All others can use the online materials, but must do so in the library building.

The general public and business community need to come to main library and utilize specific terminals to access databases and data. Not all databases are available due to licensing requirements.

The use of library resources by alumni, general public, and members of the business community are determined by our licensing agreements and location. We provide these populations access to resources when we can do so legally.

**ONLINE RESOURCE LICENSE RESTRICTIONS**

14. Did you need to revise any of your license agreements or clarify limitations of use for online resources because of expanded entrepreneurial initiatives at your institution (e.g., because of for-profit student/faculty start-ups, use by alumni or business community, etc.)? N=56

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
</tr>
<tr>
<td>No</td>
<td>42</td>
</tr>
</tbody>
</table>

*If yes, please identify the resource(s). N=13*
Access for walk-in users has been negotiated for recent subscriptions to online resources that specifically support entrepreneurship.

Bloomberg

Business databases

Campus legal counsel has reviewed licenses for electronic resources/databases.

Coordinated with the business library to expand resource coverage.

For our commercial business databases (for which we have academic licenses) we have a carefully crafted policy that explains the proper use of the databases. Namely, the databases should only be used for course-related work and for career searches. We give additional guidance to course-related projects that engage outside companies and entrepreneurs—they can use databases to gather information for the client as part of a presentation or paper, but they cannot hand over raw data or reports. The databases are not to be used for internships or jobs. We reiterate the same policies for alumni. They may use the databases to gather information for their own career advancement or enrichment, but not to distribute among their colleagues, clients, etc.

IBISWorld

Licenses have not been changed, but certain user groups have been reminded that our databases are for education use only, not for-profit use.

Most of our database licenses include a walk-in user clause.

We have added language to one of our entrepreneurship LibGuides that clarifies that most of our online resources are licensed for educational purposes only and that commercial use is not allowed.

We offer some alumni databases.

We were able to negotiate an expanded license for BCC Research (market research resource) for use by our Technology and Commercialization Office (TCO). Otherwise, our licenses are for academic, non-commercial use only.

Yes, clarification with providers and users has been necessary for most business and selected science resources. We revised the license for Statista to accommodate walk-ins. Passport GMID (from Euromonitor) is strictly licensed for academic purposes only and forces users to accept the terms of use online before using the database. The provider expected the library to restrict access to this web-based database to current affiliates instead of taking the steps of other providers to embed additional layers of authentication. Restrictions on downloads vary: 1) Some of the databases (e.g., Thomson One and Bloomberg) allow certain data to download but not others; 2) Some databases (e.g., Mintel Oxygen, Market Research.com Academic) allow downloading for academic purposes but not entrepreneurial or commercial purposes; 3) Some providers prohibit downloading for library clients (e.g., Value Line and Hoover's); 4) Some cap the number of records that can be downloaded (e.g., ReferenceUSA); and 5) Other providers (e.g., IBISWorld) don’t impose restrictions. We educate our entrepreneurial audiences on the providers’ terms for market research databases in particular and advise them to use reports only for analysis but not distribute them to others.

Answered No N=5

Community users have access to the resources while on campus, but our license agreements specifically state that the resources are to be used only for educational purposes, not for business purposes.

Not yet, but I wouldn’t be surprised if we need to do this in the future.

Our licensing agreements already contain a statement that members of the public might have access through the main campus library and branch libraries. We limit access to specific terminals.
The licensing agreements prohibit use for private ventures and specified that they are for academic use only.

The response is “NO” but some clarification may be helpful. Databases such as Passport (Euromonitor), Frost & Sullivan, Mintel, PrivCo, and Private Equity via Thomson One come with restrictions on non-commercial use regardless of user status or affiliation, not specifically because of entrepreneurial initiatives.

15. **What restrictions does the resource(s) impose? Check all that apply. N=35**

<table>
<thead>
<tr>
<th>Restriction</th>
<th>Number of Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access is restricted by IP range</td>
<td>26</td>
<td>74%</td>
</tr>
<tr>
<td>Restricted to non-commercial uses</td>
<td>23</td>
<td>66%</td>
</tr>
<tr>
<td>Restricted to use in library</td>
<td>18</td>
<td>51%</td>
</tr>
<tr>
<td>Access requires a unique login/password</td>
<td>17</td>
<td>49%</td>
</tr>
<tr>
<td>Restricted to use on a standalone computer terminal</td>
<td>12</td>
<td>34%</td>
</tr>
<tr>
<td>No off-campus access allowed</td>
<td>10</td>
<td>29%</td>
</tr>
<tr>
<td>No downloading of content allowed</td>
<td>8</td>
<td>23%</td>
</tr>
<tr>
<td>Restricted to use in non-library location</td>
<td>4</td>
<td>11%</td>
</tr>
<tr>
<td>Other restriction</td>
<td>7</td>
<td>20%</td>
</tr>
</tbody>
</table>

*Please briefly describe the other restriction. N=7*

Items restricted to just the business library.

No additional restrictions or licenses have been negotiated beyond standard disclosure that we are a public institution and that the public does have access, however is limited to certain computer terminals and resource restrictions from individual databases.

None of the resources have all of these restrictions; all have at least some of them. Off-campus access requires a unique login/password. A couple resources are also restricted by IP range. Bloomberg and Capital IQ are available on stand-alone computers in the library and the business school.

The Mintel database formerly required that users create an account using a university email address before they could print or download materials. This is no longer the case and non-affiliated patrons can use the database in the library without the account.

Walk-ins are allowed with a guest password; everyone else is managed by either IP range or authentication through EZ Proxy.

We anticipate this changing as we create iZone’s strategy and programming.

We have recently implemented an extra step of logging into a SharePoint site that is limited to the business school community only where they can then access the links to the commercial databases that are licensed for the business school only.

*Please provide any additional details on licensing agreements that are unique to entrepreneurship resources at your institution. N=6*

For each business-related database, regardless of whether it is used for entrepreneurship or not, we negotiate walk-in access for personal, educational use. The business librarian explains the ramifications of this restriction for business and entrepreneurship research, and articulates what constitutes “personal, educational use,” and also works with individual researchers in order to manage our resource use within license restrictions, including students and others engaging in
entrepreneurship projects. We have not had to revise our licenses to provide support for expanded entrepreneurship activities.

The University Libraries and the professional school libraries follow the legal restrictions required by our database vendors when access is provided to their content. Some of the content may require some of the restrictions listed in the previous question. Restrictions may be resource and location dependent. The libraries have not licensed any electronic resources specifically in support of entrepreneurship activity taking place within the university. It is possible that other parts of the university have negotiated licenses for resources in support of their entrepreneurial activities but we do not have this information.

These resources are licensed for non-commercial use by current faculty, staff, and students only. In addition to JHED access, one may need to register for a personal account with a valid JHU email address from a JHU computer in particular cases. • CMIE databases related to India (Prowessdx India, States of India, CapExdx) • BCC Research, IBISWorld, and Cortellis are examples of resources that the providers will allow Technology Ventures staff and JHU affiliates to use for entrepreneurship. • EBL (Electronic Book Library)—e-book provider • Gartner (licensed through JH IT; not the library) • Global Financial Data • Mintel • Passport GMID • PrivCo • SciFinder • SNL Real Estate • Particular installed resources (designated terminals): • Bloomberg • Datastream • Morningstar Direct • SDC Platinum • Wharton Research Data Service (and all products that require access through the WRDS platform). Access excludes the hospitals; JHU staff and part-time faculty should register for a “visitor” account at WRDS login screen: • Center for Research in Security Prices • Compustat • Deal Scan • Eventus • IVY DB OptionMetrics US • MSCI (formerly KLD Stats) • NYSE Trade and Quote (TAQ). Resources restricted to course-related or educational use: • Bloomberg (JHU offices could acquire independent contracts) • Mintel • Passport GMID. Resources providing limited content to academic clients: • MarketResearch.com Academic (more limited set of publishers than MarketResearch.com offers) • Westlaw Next.

We are a public institution so most of are licenses have walk-in use.

We are currently consulting with our Copyright and Licensing Librarian on these issues.

When we negotiate our license agreements we ask to include a clause for walk-in users, so on campus in the library there is access to many resources for alumni. However, there are many market research and financial resources that are restricted to current affiliates only both on and off campus.

**NON-LIBRARY RESOURCES FOR ENTREPRENEURSHIP**

**16. Have any non-library units at your institution purchased or licensed resources to support campus entrepreneurship activities? N=58**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>27</td>
<td>47%</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>28</td>
<td>48%</td>
</tr>
</tbody>
</table>

**If yes, please identify the unit and briefly describe the type of resource. N=24**

Boston University Information Services and Technology pays for Gartner Research, reports that provide technology-related information.

Central Entrepreneurship Office: startup and private investment database

College of Business has purchased access to Bloomberg terminals, WRDS, SDC Platinum, and other resources.
Darden ILab; Rolls Royce Rapid Prototype Lab; Mechatronic Lab & The Mill; Mech machine Shop; Ann Warrick Lacy Center; Reactor Shop/OMERF; Rice Hall 120; Drama Scene & Props Shop; Studio Art Sculpture Shop; A School Fab; BME Fabrication Space; Wilson Media & Maker Studio. Various locations have woodworking, casting, metalworking, 3D printing, CNC cutting, drones/robotics, recording, computer & software, material & data archive, electronics, 3D scanning, and virtual reality resources.

I’m not sure of the details, but some of the commercialization units on campus have purchased subscriptions to databases for entrepreneurial purposes. Frost and Sullivan and IBISWorld are two that I know of. The Small Business Development Center has subscriptions to iSell and IBISWorld. In the past, they subscribed to Reference USA.

In past years, the business technology center has purchased resources. The business counselors meet with local entrepreneurs and small business owners, as well as student entrepreneurs.

Office of Technology Management and Industry Research subscribes to a market research database (high tech), I think.

Penn Center for Innovation: patent databases, drug pipeline/tracking databases

Research foundation/tech transfer department

Rollins Center for Entrepreneurship has a number of tools. We also purchase a couple of databases in collaboration with the business school.

Schools and academic departments

Some colleges, some non-academic units: databases, data, equipment, software

Spartan Innovations is a technology transfer office here at MSU and the researchers there are generally prohibited from using our resources. As a result, they have purchased their own access to specialized/niche market research (usually highly technical), as well as sophisticated patent analytics databases.

Specialized databases/data sets acquired by Technology Ventures Office, Carey Business School, Center for Financial Economics (Economics Department).

StartupHoyas purchased productivity tracking software.

Technology transfer

The business school bears most of the cost for Bloomberg. They didn’t specifically fund it for entrepreneurship activities, though.

The business school has purchased some databases on their own.

The campus Technology Transfer Office licenses a venture capital database and provides access by non-TTO users on a case-by-case basis, on-site only. The campus computing office funds and manages the subscription to an IT and software market research database, and allows campus-wide access to the database with additional business librarian-mediated access for researchers wanting one-on-one consults with the vendor’s research analysts, on a case-by-case basis. Researchers are current faculty, students, and staff (not general public), and they must register for an account with the vendor and be IP authenticated for access.

The College of Engineering signed an agreement to create a Makerbot Innovation Lab.

The Industry Liaison Office funded the purchase of the InCites database. They are using it to identify possible matches between industry partners and OSU research teams for initial funding and eventual commercialization opportunities, and we are working with them to encourage wider campus use for those and other purposes (research/bibliometric assessment and benchmarking). OSU’s Foundation
Relations team has purchased access to The Foundation Center Online to target entrepreneurial activities in addition to their own activities.

The Isenberg School of Management has several WRDS (Wharton Research Data Services) data products and a subscription to several Bloomberg terminals.

The Kellogg School of Management has a research support center that offers access to some databases not available in the library.

Yes, but many don’t know their use in entrepreneurship. The Entrepreneurial Outreach Librarian has supported many of the tools with money or advice. FSU Foundation has licensed Foundation Center databases including the Foundation Directory. Only FSU students, faculty, and staff can access. ITS Services has licensed Gartner Higher Education Reference and lynda.com. Only FSU students, faculty, and staff can access. Career Services has licensed several databases: ArtSearch, AtoZdatabases, GoinGlobal Database, Plunkett’s Research, Versatile PhD, Vault Career Intelligence.

LIBRARY SERVICES FOR ENTREPRENEURSHIP

17. Please indicate which kinds of services the library provides specifically to support entrepreneurship activities. Check all that apply. N=54

<table>
<thead>
<tr>
<th>Service</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference (in-person, chat, etc.)</td>
<td>52</td>
<td>96%</td>
</tr>
<tr>
<td>Library instruction</td>
<td>52</td>
<td>96%</td>
</tr>
<tr>
<td>In-depth research</td>
<td>39</td>
<td>72%</td>
</tr>
<tr>
<td>Market research</td>
<td>35</td>
<td>65%</td>
</tr>
<tr>
<td>Support for business plan competitions</td>
<td>34</td>
<td>63%</td>
</tr>
<tr>
<td>Patent searching</td>
<td>22</td>
<td>41%</td>
</tr>
<tr>
<td>Fee-based consulting</td>
<td>0</td>
<td>—</td>
</tr>
<tr>
<td>Other service</td>
<td>22</td>
<td>41%</td>
</tr>
</tbody>
</table>

Please briefly describe the other service. N=22

3D printing

A yearly 2-day event, the Steacie Library Hackfest is run in partnership with LaunchYU. The event includes pitching ideas, incubating, and realizing their projects on teams and with the assistance of mentors from the university and business community; lightening talks and presentations highlighting their finished product.

Academy of Innovation/Entrepreneurship workshops are often held in the library.

As mentioned above, when courses are taught in the CID library space, there is a requirement to form some sort of collaboration with a librarian. This could be team teaching, one-shot instruction, reference consultations, etc. Other services could include reference, market, patent, and support for business plan competitions.

Collection support

Digital Media Lab offers 3D printing for product prototyping, digital production support (e.g., graphics and podcast creation), and access to the related software and equipment.

Displays, outreach

GIS, statistics, data visualization
LibGuides (research guides) on entrepreneurship and related topics
Librarians provide research support and instruction related to market research and patent searching. However, we do not conduct market research or patent searches as a service.

Literature reviews, impact metrics
Meeting spaces and some software and equipment (3D scanners, 3D printers, cameras, GoPros, green screens, etc.)
Referrals to local regional innovation centres, campus accelerators, and hosting events
Since our center is in the development stage, our focus is on partnership building and case-by-case support for individuals and teams.

The Blackstone LaunchPad, an innovation and entrepreneurship resource center founded in April 2016 and located in Syracuse University Libraries Bird Library, is accessible during extended hours, can be used for ideation workshops, team meetings, co-working, networking events, training sessions, product launches, and other collaborative activities. It is staffed by an executive director, a program manager, several interns, and is supported by a network of mentors and subject matter experts. The business, management, and entrepreneurship librarian holds office hours in the LaunchPad and receives referrals.

The business and engineering librarians will meet with students/faculty/staff regarding entrepreneurial research questions in the ways marked above. Patent searching is limited and not exhaustive. These are not offered specifically for entrepreneurship activities, but are open to anyone at our university.

The business librarian regularly has reference consultations with community entrepreneurs and teaches them how to use library resources. The library facilitates in-depth market research by providing local entrepreneurs with access to the resources, but does not have the manpower to actually perform the research.

The library provides basic support for “typical” activities such as reference and instruction, as well as any projects that use the 3D printers in the Creative Studios.

The three business subject specialist librarians offer free advisory consultations for conducting research related to entrepreneurship projects, most often for faculty and students but potentially also for public members. Other librarians and programs in our library offer resources and services that could aid potential entrepreneurs, without targeting that particular audience. For example, our library offers a series of free workshops covering topics such as copyright and intellectual property, social media presence, and managing your academic identity/profile.

We do everything listed except patent searching and fee-based consulting, but it isn’t specifically to support entrepreneurship activities.

We provide consultation appointments as well as training for patent searching and instruction on how to conduct searches (we do NOT conduct a patent search). In preparation for an appointment, we are conducting database searches that might be considered secondary market research and in-depth research.

We teach and provide support for market and industry research. Example searches are used to instruct people how to search for patents. We create LibGuides for specific topics. We have participated in the Duke STEAM challenge (consulting, data, meeting space), provide meeting space for student teams (Bass Connections and other groups), and host events in which students talk about their innovative research projects. The Ford Library creates displays for competitions and events related to entrepreneurship and innovation.
18. Where are these entrepreneurship services offered? Check all that apply. N=54

<table>
<thead>
<tr>
<th>Location</th>
<th>Reference</th>
<th>Research</th>
<th>Instruction</th>
<th>Consulting</th>
<th>Other service</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main campus library</td>
<td>47</td>
<td>33</td>
<td>42</td>
<td>19</td>
<td>7</td>
<td>48</td>
</tr>
<tr>
<td>Online</td>
<td>38</td>
<td>26</td>
<td>22</td>
<td>12</td>
<td>4</td>
<td>39</td>
</tr>
<tr>
<td>Another branch/unit library</td>
<td>23</td>
<td>19</td>
<td>21</td>
<td>9</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Business library</td>
<td>21</td>
<td>19</td>
<td>20</td>
<td>9</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>Entrepreneurship center</td>
<td>8</td>
<td>8</td>
<td>15</td>
<td>5</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Incubator</td>
<td>5</td>
<td>7</td>
<td>10</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Other location</td>
<td>12</td>
<td>10</td>
<td>26</td>
<td>6</td>
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<td>26</td>
</tr>
<tr>
<td>Total responses</td>
<td>54</td>
<td>45</td>
<td>54</td>
<td>23</td>
<td>12</td>
<td>54</td>
</tr>
</tbody>
</table>

If you selected “Another branch/unit library” above, please specify which library and which service is offered. N=24

Art, Architecture, and Engineering Library, Mlibrary at NCRC
Biomedical Library, Education Commons
Business Library, Engineering Library, Steenbock (Life Sciences) Library, Law Library
Center for Science and Social Science Information: reference, research support, instruction Cushing-Whitney Medical Library: reference, research support, instruction
Engineering Library offers instruction on makerspace use and software. Also some patent searching.
Engineering Library: reference, research, and instruction
Health Sciences Library
In our library's scholarly commons users can receive reference help, instruction, or in-depth consulting on topics such as GIS mapping applications, survey construction, and data analysis.
Jack Brause Library (real estate), NYU-Abu Dhabi library, Dibner Library: all services noted above
Journalism Library: reference, research, instruction, consulting
Law & medical libraries
Library Data Commons at Curry, Robertson Media Center, Fine Arts Library
Our 18th Avenue Library serves our engineering population and is where our engineering liaison librarians have their offices. They will answer reference questions, provide research consultations, and instruction as needed. These activities may also come out of our Research Commons, which is housed on the 3rd floor of that library.
Reference services are also available through the Pendergrass Ag Vet Med Library and Music Library.
Schaffner Library located on Northwestern University's Chicago campus. Many business school students get their library support at this location.
Science and Engineering Library: patent searching and trademark searching
Science library offers reference, research, instruction and events (other services).
Some form of all the services listed above (reference, in-depth research, market research, etc.) are offered at all three of our branch libraries.
Steacie Science and Engineering Library

STEM Library

Strozier Library: 3D scanning, research, instruction. Dirac Science Library: 3D printing, online research, instruction. Engineering Library: online research, instruction. Law Library: online research, instruction

The Duke Law School offers a Law and Entrepreneurship LLM and a JD/LLM in Law & Entrepreneurship. The Goodson Law Library supports these programs as part of its collections and services. For all categories listed in this question, consulting is not provided as a fee service and all resources are accessed following the legal restrictions in accordance with our subscription contracts.

UBC Okanagan campus library

Welch, SAIS, APL offer services besides the regional libraries under the Sheridan Libraries.

If you selected “Other location” above, please briefly describe the location and which service is offered. N=26

Business school (The business library is located inside the main library.)

Campus libraries (these are in locations outside the main campus): reference, research, and instruction.

Classroom

College of Business: instruction for veterans participating in the Entrepreneurship Bootcamp for Veterans

DOMI Station Incubator: research, instruction. Leon County Public Library: instruction. Coming soon is the “Innovation Hub” that will be located on the main campus and will function as a creative space and makerspace, JM School/Institute Building Downtown (due to be open in Fall 2017).

Embedded librarian with office hours is in the College of Business. Instruction is offered in individual classes or groups of students, e.g., Ph.D. students in entrepreneurship.

Faculty of Business (for instruction)

Faculty/department classrooms for library instruction

In the classroom

In the College of Business

Instruction can occur in campus classrooms.

Instruction in business classrooms and engineering classrooms

Instruction is offered at Business School classrooms.

Instructional workshops for the business plan competition, as well as courses about entrepreneurship, are taught by the Business Librarian on-site at either the Applied Innovation incubator, or in the classroom where the course is held.

Librarians provide these services at the various centers for entrepreneurship and innovation around campus.

Office hours are held at The Martin J. Whitman School of Management.

Reference, instruction, and in-depth consultations are offered wherever the three business subject specialists or business staff person may be located, including in an embedded library satellite space in one of the business buildings.
Reference, research, and consulting occur during on-site drop-in hours at two campus locations: the business school and the economics department (in addition to by appointment in-library). These drop-in sessions run weekly during fall, winter, and spring quarters. Entrepreneurship instruction happens primarily at the business school.

Small Business Development Center: office hours and instruction
Some academic units, some non-academic units: instruction, consulting [free]
Teaching spaces on main campus, Velocity Start space, St Paul’s College (affiliated institution)
The business librarian has attended entrepreneurial workshops off-campus in the local community.
The business librarian has taught business research strategies to the Industry Liaisons Office and the Technology Commercialization Center.
Undergraduate and MBA classrooms
We will go to where our users are as needed.
We’ve participated in the Entrepreneurship Bootcamp on the East Baltimore campus. The classroom participation activities were not in the library.

19. Who may use these library services? Check all that apply. N=53

<table>
<thead>
<tr>
<th>User category</th>
<th>Reference</th>
<th>Research</th>
<th>Instruction</th>
<th>Consulting</th>
<th>Other service</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>53</td>
<td>46</td>
<td>53</td>
<td>22</td>
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<td>53</td>
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<tr>
<td>Faculty</td>
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<td>46</td>
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<td>22</td>
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<td>53</td>
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<tr>
<td>Staff</td>
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<td>46</td>
<td>46</td>
<td>22</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>Alumni</td>
<td>45</td>
<td>30</td>
<td>20</td>
<td>12</td>
<td>4</td>
<td>45</td>
</tr>
<tr>
<td>General public</td>
<td>45</td>
<td>25</td>
<td>18</td>
<td>10</td>
<td>3</td>
<td>45</td>
</tr>
<tr>
<td>Members of the business community, entrepreneurs, etc.</td>
<td>44</td>
<td>26</td>
<td>19</td>
<td>10</td>
<td>3</td>
<td>44</td>
</tr>
<tr>
<td>Other user category</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
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<td>46</td>
<td>53</td>
<td>22</td>
<td>8</td>
<td>53</td>
</tr>
</tbody>
</table>

If you selected “Other user category” above, please briefly describe the user and identify the type of service. N=9

Alumni, general public, and members of the business community may use the resources in person at the campus facilities.
Anyone in the community (or outside the local community) may reach out to the business, management, and entrepreneurship librarian for research guidance, although students, faculty, and staff are higher priority, as far as allocation of time and services.
Instruction for veterans participating in the Entrepreneurship Bootcamp for Veterans
Our institution is public, so technically anyone can ask the Business Librarian for reference help.
Polsky Exchange members use research and instruction services provided at the incubator.
Services are offered to all classes of users, however, it is rare that the library fields business community questions. Those are more likely handled by the Small Business Development Center.

Startups affiliated with university but without “official” university status can access reference, research support, instruction, and events (other services) but not access proprietary databases.

We provide reference, research, and instruction to anyone who asks. The level of service may vary depending on user status.

20. **If library instruction is offered, please briefly describe the topics that are covered.** N=47

A wide range of business research topics are covered, usually in the “BR101” series run every semester, but other specific topics are held at various public locations covering resources and databases available to the general public. These include the public library, DOMI Station, etc. Topics covered include: company research, industry research, ideation and idea generation, market research, job searching, entrepreneurship, Wall Street research, patents and intellectual property research, funding and capital raising, and social entrepreneurship.

- Basic market research and competitive analysis
- Basic overview of categories of entrepreneurial resources (e.g., market sizing, market research, funding sources); in-class instruction for entrepreneurship classes
- Basic techniques for industry, company, and market research
- Business plan basics, marketing plans, how to find company and industry information, opportunity recognition
- Business plans, industry research, company research, patent searching, engineering and science resources
- Company research, industry research, patent searching, detailed instruction on entrepreneurship databases
- Company, industry, and market research
- Competitive intelligence, market research, international business resources, financial data resources. When entrepreneurship resources are used with local companies, it’s always in conjunction with a currently enrolled student, typically as part of classwork or special project. We do not actively support random entrepreneurship activity in the local community; typically the users are current students, faculty, and staff or people working with a current student.
- Course-related instruction for entrepreneurship courses addresses information resources and search strategies. LibGuides are created to direct users to resources appropriate to the industry of their entrepreneurial activities.
- Data analytics, research software support, research data management, GIS, digital humanities
- General business search strategies, appropriate and ethical use of content (license restrictions)
- In development
- Industry and market research, company information, business research
- Industry statistics, demographics, market research, business plans, product development, and intellectual property
- Instruction is provided in finding and using databases that provide industry, company, market data, and general information on entrepreneurship and social entrepreneurship. We also cover relevant trade publications for an industry, business plans, financing sources, new startup information, and sources for current information and news.
Introduction to business research resources and advanced search strategy techniques.

Library instruction in this area covers a wide range of business topics. The most common topics include market research/consumer analytics, competitive intelligence and competitor analysis, SWOT analyses, locating financial information and funding resources, and assistance with business plans/the business model canvas (an alternative framework to the business plan).

Library instruction includes a discussion of resources available for market and industry research both at our library and the public library, as well as search strategies.

Library instruction includes intellectual property (copyright, patents, trademarks) and also product or market research, and business plans. Overall, the instruction we offer depends on the instructor’s needs.

Market analysis, business plans, etc.

Market and industry research

Market research: company (public & private), industry, consumer, and country profiles. Competitive intelligence (current awareness)

Market research and industry research

Market research, business plans, and specific database instruction

Market research, competitive intelligence, company information, industry information

Market research, industry research, business planning, and market planning

Market research, industry resources, company, consumer information, demographics, marketing databases, entrepreneurship database, best business practices, presentation tools, electronic commerce, and how to analyze and cite data

Market research, market sizing, intro to business resources, intro to campus resources for startups, business model canvas, primary research tools and strategies, data and statistics for business/startups, startup job searching, patent searching

Market research, company, & industry information, information literacy

Patent searching, trademark searching, company information

Patent searching, searching for company data, searching for market data, searching for business financials

Patent searching, using databases for market research, researching a topic (competitive intelligence)

Patent searching, search strategies in relevant databases

Resource awareness, Information seeking, patents, marketing, funding, company, etc.

Searching for business information, product development research, marketing research, global trade and sourcing in textiles and apparel research resources, company analysis, makerspace workshops

Support for business plan/idea creation

The business librarian has taught sessions in how to do market research using free online resources to local entrepreneurial groups. He has also worked with students in how to research a company, an industry, or customer groups.

Topics covered in instruction are an overview of our resources, any restrictions on their use by the audience, and also suggestions for free (government and association) information alternatives.
Topics covered include: market research, industry research, competitor research, target audience research.

Topics include: how to research companies and industries, how to use specific databases, how to do market research, Bloomberg Boot Camp, how to find market standards, how to do patent research, and how to do trademark research.

Topics vary and depend on demand. Primarily market research and/or company/competitor research. Typically, I go into entrepreneurship classes and show students how to conduct market research, industry/company research, and how to find financial performance benchmarks for a particular industry using library and government resources.

Using business sources, using data sources

We offer in-class instruction (collaborating with faculty). We also have a credit-bearing “business essentials” course series for undergraduates that explores different research topics and products, such as data visualization using maps, marketing research, news/article research. We often tie in examples of how the research might be used in the context of entrepreneurship.

We offer one-on-one instruction in use of specific business resources, especially for innovation.

NEW FUNDS FOR ENTREPRENEURSHIP

21. Has the library received any new funds to provide support for entrepreneurship activities? Please make one selection per row. N=57

<table>
<thead>
<tr>
<th>Funds for</th>
<th>Yes</th>
<th>No</th>
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<tr>
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</tr>
<tr>
<td>Staff training</td>
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<tr>
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<td>56</td>
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</tr>
<tr>
<td>Total responses</td>
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<td>55</td>
<td>57</td>
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</tbody>
</table>

If yes, please identify the category and the source of the new funds for it (e.g., university administration, gift, corporate donor, etc.). N=12

Alumni donors, corporate donors (for makerspace, not specifically for entrepreneurship)

Don’t know source of funding for staff salary/benefits.

In addition to additional funding for electronic resources through the library’s budget, the library has received some funding from the Technology Ventures office or departments toward shared subscriptions for BCC Research and Bloomberg. It hopes to partner with Technology Ventures on a shared funding arrangement for Cortellis in the future.

Library funding

Private funds for Makerspace

Several years ago the university started a program called Mizzou Advantage. We were able to access money from that to purchase access to Frost & Sullivan (market research).

Staff salary/benefits: university administration; library resources: collection endowments designated for entrepreneurship
The Blackstone LaunchPad in the Bird Library is one of 20 LaunchPads in universities across the United States and Ireland supported by a $900,000 three-year seed-funding grant from the Blackstone Charitable Foundation. In November 2016, the Libraries won the Judges Prize at the Charleston Conference Fast Pitch Competition (in the amount of $2,500) for the idea of embedding an entrepreneurship collection of print books in the LaunchPad.

The business library has received funds from the Small Business Development Center and the Entrepreneurship Learning Community for various resources.

The library has provided the funding for staff and staff training and has received additional financial support from the university administration to deploy and equip collaborative spaces in the Main Library building, including Make Central, MSU’s makerspace.

University administration: for library resources

We have received a generous donation to design and build our future iZone space.

Answered No N=1

Internally, we have reallocated collections funds to support the acquisition of entrepreneurship resources.

**SERVICE PARTNERS, PROMOTION, AND PLANS**

22. **Does the library partner with any other department(s) in the institution to deliver entrepreneurship services? N=58**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>%</td>
<td>60%</td>
<td>40%</td>
</tr>
</tbody>
</table>

If yes, please identify the department(s) and briefly describe the service(s). N=34

Academy for Innovation and Entrepreneurship: workshops offered in the library

As described, the Steacie Library Hackfest is offered in partnership with LaunchYU. The Schulich Career Development Centre organizes two Start Up Nights per year and the Peter F. Bronfman Business Library partners with them to provide services to students.

Carson College of Business, Voiland College of Engineering

Central university entrepreneurship office, Innovations and Partnerships Office (part of VP research and innovation portfolio), various accelerators, Student life/Career Centre, various departments and faculties, undergraduate colleges, to provide library instruction, events, promotional support, panel moderation, judging panel for pitch competition, library space for non-library-related startup events, other as needed.

CFE, Tech transfer, Fast Forward Medical Innovation: instruction, consultations, and research help

Entrepreneuriat Laval (entrepreneurship incubator): instruction. Career Center: instruction

entrepreneurship@UBC, Sauder School of Business, Faculty of Management, and Applied Sciences

Ford Library partners with the Center for the Advancement of Social Entrepreneurship (CASE), the Social Entrepreneurship Accelerator (SEAD), the Center for Entrepreneurship and Innovation (CEI), the Duke Global Entrepreneurship Network (DukeGEN), the Duke Startup Challenge, the Center for Energy, Development and the Global Environment (EDGE), the Melissa & Doug Entrepreneurs, the
Duke Innovation and Entrepreneurship Initiative (I & E), and the StartupConnect to provide resources and services to support innovation and entrepreneurship at Duke. Duke Libraries has partnered with Duke Extend to create and teach an online course, “An Introduction to Patents at Duke.” We also partner with Bass Connections, DUhatch, and the Duke Innovation and Entrepreneurship Initiative to provide meeting space, reference, instruction, and research consultations. The Duke Economics Department partners with Data & Visualization Services for Bloomberg computers and helps fund graduate students' work as lab consultants.

Innovation Hub: cost share for business research

Instruction with academic units; Make-a-thon with the Entrepreneurship Village

Instructional Psychology & Technology, Computer Technology, Center for Teaching & Learning; this refers to the steering committee that oversees the CID space in the library as previously mentioned. Center for Entrepreneurship. They help us promote resources and arrange instruction sessions. We also do presentations for the Rollins Center for Entrepreneurship and Technology and get invited to meetings with future applicants.

Librarian works with the business school faculty member who coordinates the capstone sequence for the MBA entrepreneurship courses, called Lab to Market. Activities include maintaining customized LibGuide, one-shot instruction, and promotion of services (drop-in hours and email/phone/computer consults by appointment) to this group. This cycle occurs each academic year for each of three cohorts of MBA students (full-time, part-time evening, and weekend cohorts). This year, the L2M sequence allowed engineering school entrepreneurship students to join.

Mays Business School (affiliated with the Center for New Ventures and Entrepreneurship that sponsors a business plan competition, hosts a student incubator, and other entrepreneurial activities. Several of the Mays Business School work for the center or guest lecture at the center for certain classes.) College of Engineering (Library provides a specialized patent searching workshop for engineering students, in conjunction with the Engineering Innovation Center, a “makerspace” of sorts with tools, equipment, and classroom space/support for students.)

Only by helping the Business School fund Bloomberg. I also refer members of the business community to the Small Business Development Center, but there is no formal agreement in place to do this.

Our major partners are the Yale Entrepreneurial Institute and the Center for Engineering Innovation and Design. With YEI, we engage in outreach to entrepreneurs through events like the annual Entrepreneurship Bazaar and provide orientation and instruction to the YEI Summer Fellows. At the CEID, we hold workshops on entrepreneurship resources and research strategies.

SBTDC, Missouri Innovations Center, Coulter Translational Partnership Program

Some non-academic units that are involved in research, industry engagement, technology transfer, small business consulting: consultation appointments, workshops

St Paul's, Velocity, CBET. Services include displays, workshops, instruction, information sessions with administration to highlight library resources.

StartupHoyas; Science, Technology, and International Affairs (major in School of Foreign Service)

Such opportunities are often one-off, rather than recurring. As an example, one of the business specialists partnered with our school of information (library school) to manage consulting projects for library students. Another business librarian participated in an entrepreneurship course for graduate-level students in fine and applied arts. All three of the business librarians have at some point done instruction for entrepreneurship classes with a blended audience of business and engineering students, offered jointly through our college of business and our college of engineering.
The Blackstone LaunchPad has established a monthly meeting of a cross-campus Entrepreneurship Roundtable (E-Table), a 45-member group of faculty and staff engaged with entrepreneurship. Representatives include faculty who teach courses in entrepreneurship and program staff who work with entrepreneurially minded students. The focus of each meeting is outreach, information sharing, collaborative event planning, and support for cross-campus entrepreneurial activities. The Business, Management, and Entrepreneurship Librarian provides instruction and consultation support to students in the Whitman School of Management, the IVMF EBV and EBV-F programs, and the South Side Innovation Center (supported by Whitman) Business Planning Course.

The business librarian partners with the College of Business in supporting the Entrepreneurship Bootcamp for Veterans. She provides instruction, both online and in-person, as well as individualized research consultations.

The entrepreneurship center, the career center, the community leadership center, related faculty and curriculum, student clubs and government, the business school,

The Kentucky Small Business Development Center: the business librarian supervises a student researcher. We have also had training sessions for their consultants. We have worked with the Small Business advisory group SCORE occasionally in the past. They have sent clients to us for research consultations.

The Libraries is participating with Farley Center for Innovation & Entrepreneurship, NU Corporate Engagement, Kellogg School of Management (KEIU), McCormick School of Engineering, Medill School of Journalism, and Integrated Marketing & Communications to support teaching and research.

The library has been involved with Global Entrepreneurship Week for several years. Several librarians have delivered programming and some events are held in the library.

The PTRC works with the TTO (Technology Transfer Office) to offer patent and trademark education and services.

There are a number of departments that the library collaborates with in this arena given the expansive nature of entrepreneurship activities on campus. Some of the more notable or significant partnerships involve the Business, Arts and Letters, and Communication Arts departments. For example, there have been many workshops held at the library’s makerspace around things like 3D printing and an MBA class used our capacity in this area to support a product design class. The Entrepreneurship Librarian has also played a role in planning and supporting student business plan competitions and student hackathons in conjunction with the colleges listed above.

U[Tech] (IT department) for digital scholarship

We have coordinated with Tech Ventures, the Economics Department, and the Carey Business School to jointly acquire selected database subscriptions and educate staff on other available resources. We’ve coordinated with faculty in the various schools to support classes or programs or provide general training on resources.

We partner with the Polsky Exchange. They had a pre-existing mentorship program that the Business & Economics Librarian for Instruction & Outreach joined in order to increase support to members. Before she started office hours at the Polsky Exchange, there was no formal research support.

We partner with VT Intellectual Property (VTIP) for office hours and workshops and consulting.

We work with the research foundation/tech transfer office. Librarians conduct a workshop every year for interns in that department. Libraries also refer faculty and staff to that department when they require help bringing a product to market.
Wisconsin School of Business’ Weinert Center for Entrepreneurship (instruction, fellowships, investments); UW Housing (the entrepreneurship residential learning community); Law School (Law & Entrepreneurship Clinic); Discovery to Product (Business & Entrepreneurship and Accelerator program); WARF (technology transfer, public talks, and some funds for technology development); Small Business Development Center (consulting for area start ups and companies); College of Engineering (transcend student organizations that host innovation contests, some curriculum in biomedical engineering on technology development for entrepreneurial settings); UW Arts Institute (sponsors a student organization and a contest for artists); College of Letters and Science (hosts the Computer Science department’s NEST contest); The University INSITE cluster (faculty in the College of Ag and Life Sciences, Law, and Business developing courses, supporting other activities mentioned above); The university’s Office of Corporate Relations (hosts an annual entrepreneurial lifetime achievement award reception, directs queries across campus); Burill Competition; WEB Bootcamp; Discovery to Product Upstart Program (women and minorities); UW-Extension Ideadvance Seed Fund; Wisconsin SBIR - Center for Technology Commercialization

Answered No N=2

Not officially, but one of our librarians teaches the introductory entrepreneurship course for the College of Business.

University Libraries has partnered with Jim Moran School of Entrepreneurship to deliver non-credit classes and help get the word out about new databases and resources the library has purchased. The Jim Moran Institute’s Entrepreneurial Bootcamp for Wounded Veterans asks the Entrepreneurial Outreach Librarian to speak on market research databases, tools, and techniques each year. Several student groups in the business school and the engineering school ask for speaking engagements with the Entrepreneurial Outreach Librarian on databases and resources.

23. Please briefly describe any outreach activities the library uses to promote its entrepreneurship resources and/or services. N=41

Attendance at social events and meetings. Seat on planning committee for Bringing Up Missouri Business, a week of start-up activities coordinated by the Vice-Provost for Economic Development.

Displays, attending Velocity pitch competitions, St Paul’s Greenhouse innovation showcase, etc.

Email list, connections with other campus groups, faculty retreats, course-integrated instruction, and newsletters are used to promote these resources and services. To keep a good relationship with the entrepreneurship center, we have a link from their page and we get referrals. We also promote their services to students who come to our offices.

Email notices are sent to students through the graduate and undergraduate offices and to faculty who teach entrepreneurship courses. We have also sent a description of library resources to the BuzzLab for inclusion in the Buzzlab email newsletter. We also include news about library resources pertaining to entrepreneurship on the library news web pages.

Entrepreneurship library website; Entrepreneuriat Laval website (entrepreneurship incubator);
Attendance to entrepreneurship conferences & activities (the business librarian is a member of the entrepreneurship incubator.)
Entrepreneurship research guide, contacts with faculty, course related instruction, contacts with program staff in the College of Business and the Pappajohn Center

Every semester, we reach out to the entrepreneurship faculty to learn about projects we can support via consultations, instruction, or guides.
Faculty liaison, class visits, social media channels, book displays on the theme, research guides
General liaison work with the department faculty

In-person or online liaison activities; Code+Art contest encouraged students to create large-scale, data-driven “generative art” for the twenty-foot wide Art Wall (sponsored by Christie).

Instruction, workshops

Instruction for students, present to members of the Entrepreneurial Centre and incubation lab, online guide on entrepreneurship resources
Instruction in business/entrepreneurial classes. Specialized support for business plan competitions, including library contact during the competition orientation, a display of books focused on business plans, and hosted walk-in hours for competition participants. LibGuides specifically created for entrepreneurial activities. Support during Entrepreneurial Bootcamp for Veterans (EBV) including “library tables” each night of the program with librarians available to help with research.

LibGuide for market research resources promoted to librarians in contact with other departments with entrepreneurial activity. Weekly drop-in office hours at the business school and at the economics department are advertised on the LibGuides, through emails to students, faculty, and staff of those departments. Business librarian attends graduate student orientations and campus-wide graduate students’ networking event. Business librarian periodically reaches out and cultivates contacts in Technology Transfer Office and vice versa, and provides small group training on demand.

LibGuides

LibGuides and webpages on the library website
LibGuides, social media, Innovation Library, and the Small Business Accelerator program

Maker Hub has a newsletter, a Google group, a Facebook page, and they use fliers.

Materials and services are promoted in meetings, classrooms, and workshops.

Networking by the business librarian with stakeholder staff and faculty involved in entrepreneurial endeavors.

Nothing specifically for entrepreneurship.

Our marketing plan is in development.

Our outreach in this arena has been limited to workshops held in the Main Library. However, we also make sure we are listed as a resource on the various university and community websites related to entrepreneurship.

Page on library website, monthly newsletter to accelerator directors and central entrepreneurship office administration, posters and digital signage, social media, numerous LibGuides, listserv for library entrepreneurship workshops and other events/news, librarian community of practice, presence at events, hosting of events, cross promotion on various newsletters and event calendars

Presentations, instruction

Primarily through informal conversations with faculty or presentations by business librarian at faculty council meetings.

PTRC Outreach brochure: Patenting an invention and trademarking a product name can be challenging. PTRC library staff are information experts trained on how to use search tools to access patent and trademark information. They provide the human touch that no web page or legal book can provide in helping inventors and small businesses find the information they need to protect their intellectual property. However, PTRC representatives are not attorneys and cannot provide legal
advice. PTRC library staff can assist with the following: Provide access to resources such as PubEAST and PubWEST, examiner-based search systems. Direct you to information and explain the application process and fee schedule. Demonstrate how to use search tools to conduct a patent or trademark search. Show you a directory of local patent attorneys who are licensed to practice before the USPTO. Offer classes on intellectual property (varies by location). Offer assistance on how to do historical research patents and trademarks. Show you how to track current research by company or nonprofit. Help you find assignee information and much more.

Talks on patents at public library, patent workshops for graduate students

The Blackstone LaunchPad conducts a number of outreach activities. In addition, the business, management, and entrepreneurship librarian communicates with Whitman students, faculty, and staff with messages about library (and business librarian) services and holds weekly office hours (which are listed on the Business Information LibGuide). The business, management, and entrepreneurship librarian also holds office hours in the Blackstone LaunchPad, which are advertised via the Blackstone e-newsletter campus wide.

The business librarian has led training sessions with the KSBDC consultants. He attended and presented to a local Inventors Club. He attended a workshop series for entrepreneurs sponsored by a local newspaper.

The business librarian provides outreach to faculty and staff in the College of Business. Through these connections, faculty and students are aware of the resources and services available. The business librarian also provides numerous online guides to information useful to entrepreneurs that are findable via the Libraries’ website and the web.

The Business Research 101 class reaches/trains an average of 70–100 people a semester to use business databases and tools from the library. A poster series was started spring 2017 to promote the library’s entrepreneurship resources and spaces. Workbook series has been developed with help from DOMI Station and JMI Incubator to help guide student entrepreneurs through the ideation and startup process.

The Libraries create events, displays, and LibGuides; provide instruction and research consultations; and promote events.

The library uses social media, its news site, and word of mouth/relationship building to promote services. The mentor office hours at the incubator are also promoted through email marketing to members.

The library’s entrepreneurship offerings are publicized on the Yale Entrepreneurship Calendar. Librarians promote resources and services at the annual Entrepreneurship Bazaar and in workshops on entrepreneurship topics. The team of librarians who support entrepreneurship are in regular contact with staff at the entrepreneurship centers around campus. The Librarian for Business and Management routinely attends entrepreneurship events hosted by these centers in order to raise the visibility of our services and learn about the issues and topics that are important to our campus community.

We do not do anything specific for entrepreneurship.

We don’t have an entrepreneurship librarian. We can’t support it so we do not promote it.

We have a robust program of course-related-instruction. Librarians have also presented information at boot camps. Additionally, librarians have been embedded in online courses. Finally, librarians have been active participants in student and community entrepreneurship events.

We partner with other entrepreneurship-oriented groups to promote our resources and services through their social media, event announcements, etc.
We reach out to faculty to tell them we’re available to provide instructional services and research consultations for the various course-related entrepreneurship activities offered. We promote the availability of databases that COULD be used for entrepreneurship research to faculty, students, university staff, and the Technology Ventures Office. We identify and collaborate with university personnel at various campuses to secure shared subscriptions to specialize resources that support the university’s entrepreneurial research (e.g., Cortellis, ReCap) where feasible.

Word of mouth or newsletters

24. **Are there any significant gaps in library services that specifically support entrepreneurship?** N=53

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<tbody>
<tr>
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</tr>
<tr>
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</tbody>
</table>

**If yes, please briefly describe the gap.** N=31

Because there is no entrepreneurship librarian the responsibility to liaise with the various entrepreneurship entities on campus becomes an “add-on” to other duties. As a result, there is no consistent effort to create and evaluate services at the university.

Database subscriptions related to venture capital, e.g., CB Insights or Pitchbook. Also staffing—there’s one librarian covering business & economics for the whole campus.

Developing a service or product to track post-Penn entrepreneurial successes and failures. What companies do alumni found? How can that be connected to the experiences and knowledge that they gained while at Penn? More sophisticated design services for visualization and product design/development.

If we had more resources and people, we could do custom research for entrepreneurs, create professional documents (UNC does a terrific job). We also should have either a makerspace or have equipment that people could check out, items like sewing machines, circuit kits (for teaching yourself), etc.

It would be ideal to have a half-time position for entrepreneurial programs, especially in teaching how to conduct patent searching, but at this time, there are many other competing demands.

iZone will address the gap that was identified in an extensive research process.

Lack of specialized skills and entrepreneurship resources

Large business data sets

Library subscriptions to applied (vs academic) market research databases, access support for university-affiliated startups without library access

Likely, but this has not been assessed and therefore, we are not able to comment further.

Most of the entrepreneurial inquiries are related to local markets and we just don’t have a lot of data or information on the region to draw upon for the types of business ideas that students pursue.

Need access to local- or state-level market research data.

Need to support business plan competitions and other experiential activities

No coordination of library efforts on campus.

Not so much gaps as the need to figure out how to build our services in a sustainable way.

Our databases are currently licensed for educational purposes. We will need additional funding in order to renegotiate terms to allow for broader access.
Set up of a formal service offering (and a librarian officially dedicated to entrepreneurship). Revision of our database license agreements to expand the access to more users (e.g., alumni). Subscription to specialized health & sciences market research databases to respond to emerging needs.

Since there is not a dedicated librarian or staff position specifically responsible for supporting entrepreneurship, we can only assume that there are gaps in library services for this community. The librarians currently provide support as part of a wide suite of liaison support for their very large constituencies.

Staff levels have limited our ability to conduct outreach and develop more intensive services for entrepreneurship.

STEM graduate researchers and STEM faculty

Strategic direction and formal plan within the library that specifically supports entrepreneurship.

The business school uses the library’s research guide, but the library isn’t incorporated into their curriculum.

The CID space in the library needs to be larger to accommodate more groups; better technology is needed; more flexible furniture is needed; we could also develop better outreach, better collaboration between faculty and librarians, etc. In addition, we only buy bundles of market research. We have no means to buy individual research reports or “house” them.

There are gaps in our market research database report collection. We have seen an increase in research requests for the bio-tech market. The market research databases that offer those reports are costly.

There are resources that would be useful to entrepreneurs that we don’t have access to. We also are limited in the amount of support we can provide because of staffing.

There are several databases the entrepreneurship faculty would like but we have been unable to purchase them due to funding. These include expanded databases with additional industry and company profiles, including private company research, a business plan competition database, and private equity and venture capital databases.

There is a need for more market research targeted to health innovation and medical devices, and to pharma data. We would also like more resources that demonstrate best practices for using specialized equipment that support innovation and entrepreneurship.

We could reach a lot more people if we had more time and manpower. We could purchase more resources if we had more money.

We do not have dedicated staff specifically for this role.

We don’t currently have a focused strategy to provide services to support entrepreneurship.

We need a minimum of two more market research databases to be on par with our comparator universities supporting entrepreneurship activity, in order to expand our coverage of technology, consumer, and biomedical markets. We do not have any campus-wide access to venture capital/angel investing funding databases, and the demand for this information is growing beyond sending them to use the Tech Transfer Office license. We do not have good depth in business directory resources that are typical for our size university and the amount of entrepreneurship research happening here, and there are a couple of biomedical and engineering entrepreneurship trade journals that would be welcome here if we can figure out how to fund them. Would love to see a joint development initiative to fund such resources expansion for entrepreneurship between library, business school, and engineering school, but so far the business librarian’s efforts at such discussions haven’t seen any movement.
Answered No  N=5

I wouldn't say there are any significant gaps in library services at this time, other than the fact that the activity in entrepreneurship around campus has exploded over the past few years to the point that there is more than enough work for one person. Our next step will likely involve training up subject librarians in other areas (ranging from the arts to veterinary medicine) to support entrepreneurship inquiries. Needs could be addressed more if more staffing was available. No, because no resources specifically (solely) support entrepreneurship. Our services in this area are constantly evolving based on campus needs. This is an emerging area at WSU Pullman. It has not yet exceeded our current capabilities and resources. It may if it continues to develop.

25. Does the library plan to develop any new products and/or services in the near future to enhance its support for entrepreneurship?  N=55

Yes  29  53%
No  26  47%

If yes, please briefly describe the product or service.  N=29

A new campus in development for Markham supports community engagement inclusive of entrepreneurial activities with students and industry/business in the community. The Peter F. Bronfman Business Library has plans to offer tailored support for students enrolled in the Start-Up Night events.

A new research guide or web portal for entrepreneurship

Although doubtful, we have included support for this need in a recent program review.

Arts & Entrepreneurship Colloquium for fall 2017 is in the planning stages. STEM graduate student research class is in planning stage. Online BR101 classes are in the planning stages.

Blackstone LaunchPad and the Libraries plan to provide access to a new patent research database, along with expert patent research guidance from students at the Law Center, who will hold weekly office hours at the LaunchPad.

Giving more & longer market research workshops at Entrepreneuriat Laval (entrepreneurship incubator). Tightening collaboration between the business librarian & the statistics librarian. Enhancement of the entrepreneurship library website.

In development

Library subscriptions to applied (vs academic) market research databases, access support for university-affiliated startups without library access

Once an entrepreneurship librarian is in place we hope to create a suite of services to support the initiative.

Once we have our entrepreneurship librarian on board, we anticipate new and enhanced services to support the entrepreneurship curriculum and university-wide initiatives relating to entrepreneurship.

Our campus is building a design learning facility that will come online in 2019. In preparation for the design center, the campus is organizing a distributed design network of services in which
the library is an active node. Activities to be supported include curriculum-related, research, and entrepreneurial activities.

Partner with new Entrepreneurship Centre director to develop instructional support for entrepreneurship competitions.

“Perhaps” is a better answer than “yes.” The business librarian is considering creating a series of quick video tutorials about using the market research resources. A few outreach and instruction ideas floated but not yet developed with librarians in engineering, pharma, and data.

Software development tools

Still in planning stage

The Law Library is planning more extensive outreach to the Entrepreneurship Clinic, since they are away from the building, in order to better engage the students and staff. Science and engineering librarians are exploring the possibility of creating an innovation and entrepreneurship team.

The librarians who support entrepreneurship are considering offering new workshops, and/or rebranding some workshops to attract entrepreneurs. They are moving from offering general workshops on entrepreneurship resources to offering a suite of workshops that allow participants an in-depth view of specific resources or strategies. They are currently designing a workshop on identifying potential investors.

The library intends to create a “Small Business Center” portion of the library collating small business materials the library already owns and arranging them in one place to be a “one stop shop” for small business information.

The library is sponsoring speakers to discuss their expertise in entrepreneurship during an upcoming event.

The library plans to increase outreach to the BuzzLab and to student entrepreneurship clubs.

The library would like to purchase or subscribe to focused research on emerging industries and technologies.

There are future plans to redevelop the Biomedical Library, which will likely include a more sophisticated makerspace staffed with individuals with design expertise.

We are actively evaluating research databases for future acquisition. We continue to provide outreach to other campus departments. We are looking for additional opportunities to collaborate and partner with others on campus.

We are currently developing plans to expand and improve the CID space in the library.

We are in early stages: assessing needs and potential, including environmental scan.

We plan on expanding instruction at the incubator. We also continue to expand outreach and support to the many entrepreneurial activities on campus.

We plan to address this through liaison to entrepreneurial center and departments. We plan to educate ourselves on support for educational product development.

We would like to develop more workshops on more topics of interest to entrepreneurs/inventors targeted to students, as well as to the non-campus community.

We’ll likely coordinate/publicize.
ASSESSING LIBRARY SUPPORT FOR ENTREPRENEURSHIP

26. Has your library assessed the impact or success of the services that support entrepreneurship?
N=56

Yes 6 11%
No yet, but we plan to 17 30%
No 33 59%

If yes or you plan to, what measures are (will be) used to assess these services? N=17

Answered Yes N=6

Solicit feedback after instruction sessions.
The sessions that are conducted for the Small Business Development Center are assessed through the SBDC. The Law Library, after they have completed further outreach, will assess attendance and impact of our sessions.

We capture statistics on consultations, outreach, database usage, and instruction for library internal use, but entrepreneurship as a focus isn’t formally tracked except by the business librarian. The library also tracks database usage statistics and cost-per-use. Business librarian tracks which master’s level cohorts use the consultation and drop-in services most. No reporting out to the business or engineering schools has happened nor has it been requested, except on an informal, anecdotal basis to determine on-site drop-in hours.

We have done this in a very limited way by keeping track of business plan finalists to see which teams have consulted with us.

We have surveyed faculty and students who have used the CID space in our library to determine what they liked about the space, what could be improved, etc. in the same way we assess all of our services.

Yes, we’ve assessed instruction through one-minute surveys in some of the classes and feedback from some of the faculty

Answered Not yet, but we plan to N=11

At this point, probably just a conversation between liaison librarians currently providing support to the entrepreneurship centers affiliated with specific colleges to gauge evolving needs.

Not sure. Likely will include standard metrics, as well as impact statements from startups. Our regional innovation centre does a great job of measuring value of services provided to startups but their model is different than ours. Will consult with them, as well as with library and campus stakeholders, to figure it out.

TBD. Currently we have anecdotal feedback on what works. More quantitative data will be tricky to obtain in a meaningful way due to the distributed nature of entrepreneurship here.

The Entrepreneurial Outreach Librarian is working to help guide, develop, and understand the university’s assessment needs and plans, as well as how the new Jim Moran School of Entrepreneurship will fit into these plans. University Libraries want to demonstrate value to both the school and university while also helping both meet their assessment goals they are just now beginning to design.
The Polsky Exchange has been collecting feedback from mentors and mentees on office hours. We plan on approaching them to collaborate on an assessment analysis of this feedback.

There is a general recognition and understanding that such assessment would be beneficial, but no conversations have been held. It would be premature to identify specific measures.

We are constantly collecting data, but we only have a few months of data at this point. We intend to focus more on analysis in the future.

We are currently tracking our support for entrepreneurship in LibCal/LibInsight and distributing workshop evaluation forms. We are considering ways to measure the impact of these services.

We have not yet developed an assessment plan.

We plan to assess use of resources acquired specifically to support entrepreneurship: usage statistics, verbal feedback.

We were a beta partner for Measure the Future.

Answered No N=1

The library seeks feedback on all activities supporting the college, but not specifically on our support for entrepreneurship.

**CHALLENGES**

27. **Please describe up to three of the most significant challenges faced by your library in providing support for campus entrepreneurship activities. Please list these challenges in order from most impactful (1) to least impactful (3).** N=52

Ability to provide services to non-university clients, e.g., startups. Ability to keep up with demand for entrepreneurship services. Ability to maintain collections levels and add additional electronic resources.

Awareness of need(s). Providing all resources needed.

Budget (2 responses)

Campus entrepreneurial activity is decentralized, making it hard to become an official “partner.” Most entrepreneurial activity on this campus is social innovation so the ideas don't always fit traditional biz plan methods. Early stage entrepreneurs don't realize how much information is available to them from the library.

Collections: current, real world, cutting edge. Staff members dedicated to supporting the university entrepreneurship activities. Funding.

Collections to support applied research needs. Perceptions of library as valued partner for startups. Liminal status of many in the entrepreneurship community doesn't match “gated” license agreements.

Commercial licenses for products. Staffing. Lack of centralized structure for entrepreneurial activity.

Communication with faculty on initiatives and projects. Limitations of resource licensing. Staffing: our small team is spread thin across many academic areas and programs, so not able to dedicate time to develop our entrepreneurship-related services.

Conditions of use restrictions for specialized business resources. Lack of response from key stakeholders.
Cost of market research databases. Staffing to support all of the entrepreneurial activities. Marketing our library services.

Creating an open and inclusive environment for all disciplines and backgrounds. Creating a strong and unique identity in relation to the other campus entrepreneurial offerings and centers. Designing our physical space to support our mission while still maintaining an open access environment.

Database licenses that prohibit use for commercial purposes. Lack of financial resources for renegotiating existing database licenses to allow for greater access. Lack of financial resources to acquire new databases.

Developing stronger relationships with campus entrepreneurial groups. Funding. Staffing.

Disseminating information about the library’s resources and services. Lack of additional staff to focus more time on entrepreneurship activities. Lack of funds to purchase additional databases and online resources.

Entrepreneurship being spread out over many schools and other units. Licensing challenges. Resource pricing.

Funding. Staffing. Space.

Funding. Loose structure of programs on campus. Some are well connected to the library. Others are not. Time, if all programs began requesting library services.

Funding (and continuation funding) for entrepreneurial resources (databases, books, online serials, etc.) Funding for staff. Funding for entrepreneurial resources (databases, books, online serials, etc.) for alumni (and possibly the public).

Funding for resources. Lack of specialized knowledge. Units don’t see the need.

Hard to make our services know across campus to a wide variety of users. Funding for future resources, display spaces. Cultural “perceptions” that are difficult to overcome—entrepreneurs want to act immediately, the library promotes researching first.

Having a comprehensive understanding of campus needs for support at this time. Ascertaining the skills for supporting entrepreneurship. Making decisions about space and technology needs that could support entrepreneurship across disciplines.

Human and financial resources. Sustainable partnerships (relationship-building across campus takes a concerted effort). Space.

Insufficient funding. Only one librarian assigned to the College of Business.

Insufficient staffing. Insufficient database subscriptions. Insufficient user awareness of library resources and capabilities, which gets back to insufficient staffing.

Keeping track of entrepreneurship activities across campus—both where these activities “live” administratively and how these decentralized groups work together. The lines between student ventures and non-academic, for-profit ventures can be blurry; these blurred lines could have implications for our license agreements. Funding for new entrepreneurship resources.

Lack of additional funding. Lack of staff expertise/funding.

Lack of an entrepreneurship librarian dedicated to support the program. Providing access to the resources (print and e-) that support the variety of entrepreneurship interests.

Lack of campus-level coordination. Our “college” structure is very decentralized and would be a massive undertaking for the university to try to align across various colleges. Our overall flat budget for collections has made acquiring additional on-going resources a challenge across the board. This would include any resources that would benefit entrepreneurs on campus along with relevant academic
programs and faculty research areas. Lack of dedicated librarian or staff member for these activities; probably until this becomes a university priority, a separate line in the library would not be feasible.

Lack of coherent campus plan. Funding to support targeted resources. Dedicated personnel.

Lack of funding. Uneven promotion of licensed resources. License restrictions of database terms.

Lack of funding to purchase resources. Lack of manpower to offer services and programming. Lack of expertise among the people we do have.

Lack of strategic plan that prioritizes entrepreneurship. Workload. Licensing restrictions.

Licensing and price negotiations for resources that support these activities, plus the need to educate others on, and be mindful of, licensing restrictions and the university’s local policies regarding authorized use and promotion of resources, particularly for non-course sponsored business plan or case competitions (and national or regional competitions). Libraries must have clear policies that are consistently applied, yet know where to make judgment calls, depending on the situation or circumstances. Librarians have concerns about potentially not providing the same level of support for regional or national competitions as libraries at other universities. Some providers are becoming more flexible and understanding about the direction that universities are taking to incorporate real-life problem-solving experiences, or steps for commercializing actual technologies, within course assignments. The decentralized nature of entrepreneurial activities university-wide, and the many different people and programs that are already supporting entrepreneurial activities in various ways. The ability to more strategically support this work with existing staff.

Licensing issues. While we haven’t directly had any problems yet, I foresee more issues as our students, faculty, and staff increasingly collaborate with individuals outside our institution. Paying for new resources. Trying to herd cats to gather small amounts of funding from many different parties for more expensive resources. Determining appropriate resources and services for the different stages of the entrepreneurial cycle.

Licensing of resources. It is difficult to determine what resources and what level of service are needed. It is difficult to make resources widely available at a reasonable cost. How to best enhance program engagement with campus users. The high cost of market research reports that are often needed by only one user.

Limited staff. Limited materials budget. Very few collaborative efforts.

Money. Time to devote to entrepreneurship. License restrictions from database vendors.

Money—especially for popular-level books (they are often excluded from approval plans). Space (time slots often unavailable for instruction rooms.) Database restrictions (potential difficulties in working with campus staff—their use is to advance our institution’s goals, but it is very close to the line of “commercial” use.)

Money to fund enough market research resources, and advocacy about the need for funding by the major decentralized communities on campus that need these resources but expect the funding to come out of thin air. Lack of time for the librarian to develop additional outreach and just-in-time online instruction. Managing researchers’ knowledge of the use restrictions of the licensed resources so that it doesn’t take a lot of the librarian’s time yet maintains appropriate use of our resources.

Non-centralized nature of entrepreneurship at this campus. Disconnect between non-profit and for-profit needs/expectations. Definition of entrepreneurship is broad and differs from group to group.

Not directly involved in the decision making process of the centers/programs that create/host entrepreneurial classes and programs. Accessing entrepreneurial users is difficult, especially when they are working in the incubator, a location that is not near the library. Constantly changing and evolving programs makes keeping track of contacts/programs a challenge.
Scalability. Interest in this area has exploded on campus and there is now more work than any one librarian can handle. We will need to move to managing a team of librarians offering complementary services (GIS, 3D printing, data services) and will also need to train non-business librarians to handle the new research and reference questions that they may face. Licensing restrictions on electronic resources. Most of the business resources requested by entrepreneurship students and faculty are restricted to non-commercial use. This gets fuzzier when students are using the resources for class projects or case competitions that have the launch of a real business as an educational goal. New arrangements with database vendors need to be explored to allow for this kind of use. Keeping up with campus initiatives. There are many and priorities often change quickly. This is one area where a library's inability or unwillingness to pivot quickly will leave them in the dust.

Securing funding to improve the CID space. Developing long-lasting collaborations between partners. Resources licensed for non-commercial use.


Staffing. Outreach to faculty. Decentralized nature of university innovation centers.

Staffing. Budget for resources. Awareness of services.

Staffing constraints. Collections budget restraints.

Students are often seeking very specialized market research and industry reports, which cost several thousand dollars per report. The Libraries is not able to provide access to every single specialized report in existence. Students sometimes expect the business, management, and entrepreneurship librarian to provide guidance on how to use or interpret the data and information available. The business librarian is not qualified to do this (and it is not the business librarian's role to do so). Fortunately, the business librarian is able to refer to other sources on campus, such as the Blackstone LaunchPad, to provide that type of guidance when the person asking is an aspiring entrepreneur. But, it is a little more complicated when students in a class are seeking this type of guidance because they are often reluctant to approach their professor for guidance. And, for either user, it is inconvenient to have to make an appointment with someone else, if they had expected the business librarian could provide this guidance. There is always a need for more staff (or maybe more training of existing staff) to be able to help students and entrepreneurs who have business research questions right at the point of need. Often, if the question is complicated, it gets referred to the business, management, and entrepreneurship librarian, who is not able to answer or schedule a meeting with the user until the next business day. This approach may be unavoidable, but there may be some ways we can provide greater business research support at the point of need (without relying primarily on one individual).

There is no specific, over-arching coordinated campus-wide effort to which the library could contribute, which means our current services are scattered and hit-or-miss rather than carefully targeted for efficiency and impact. Budget restrictions make expanding resources and services for entrepreneurs impractical at this time. Neither collections funds nor personnel funds are likely to be allocated for the needs of entrepreneurs at any time in the coming five years. Licensing restrictions on databases, particularly market research databases, prohibit use for non-classroom activities or use by anyone unaffiliated with our institution, as vendors perceive this as misuse on behalf of for-profit ventures. Vendors have temporarily halted institutional access to some databases in response.

To get the library recognized as an added value, and the librarians as major stakeholders in entrepreneurship. To develop our competencies to respond to entrepreneurship needs. To get involved in research and innovation issues.

We have no plan in place to support. We have no resources to support. Work is done mostly through business school.
ADDITIONAL COMMENTS

28. Please enter any additional information regarding support for entrepreneurship at your library that may assist the authors in accurately analyzing the results of this survey. N=20

As I noted, this is an emerging area at the university and several of the issues covered in this survey have not yet arisen. I anticipate they will within two years.

As mentioned elsewhere in our responses, currently entrepreneurship is supported by liaison librarians (one business and two engineering) as part of the suite of services offered to their constituent communities as affiliated with their colleges (College of Business and the College of Engineering). Our Research Commons houses some software and data resources that may be used for entrepreneurial activities, though they were not specifically acquired for or marketed for this purpose. The business librarian and Head of Research Services have worked with the Technology and Commercialization Office and the Industry Liaison Office by offering targeted instruction around research support and business research strategies.

Business library is not part of the University Library.

Entrepreneurship (and its related activities) is interpreted in various ways on our campus, resulting in activities that are distributed across numerous disciplines, not solely focused on business. While there is a substantial amount of activity, and the library is engaged informally in entrepreneurship programs with a number of units, it is difficult to articulate the specific points of contact due to the decentralized nature of entrepreneurship on this campus.

Entrepreneurship activities here are intrinsically tied with classes and students’ experiential learning activities for credit. We rarely serve the general public for entrepreneurship, unless those individuals have ties with the students or incubators here. The librarians have been involved in supporting entrepreneurship initiatives, which are part of the campus-wide economic contribution to the community and nation. It’s hard to quantify the library’s role in this activity, yet its resources and services are significant to the early stages of product development and market research.

Entrepreneurship here has been very “bottom-up” driven until very recently. This has led to a dispersed effort, unlike many universities. It has also led to entrepreneurship efforts having to show value and effect unlike some universities where it becomes an “entrepreneurship thing” the university runs to check a box on a survey. Our students truly have a voice and are actively involved in starting companies throughout their career here and while many of these companies never make it out of the university, the lessons learned last and are beginning to bear fruit.

Entrepreneurship is certainly a growing trend on this campus and pushing it out of the business school is one of the ultimate objectives. We’ve had good success with supporting the current level of entrepreneurial activity, but if demand grows we may have to look at some of the suggestions laid out in the survey.

Here are some of our resources that support entrepreneurship: CAUSE: Center for Advancement & Understanding of Social Enterprises (School of Business); Small Enterprise Economic Development (a cooperative effort between School of Business, the School of Social Welfare, the Small Business Development Center, and the State Employees Federal Credit Union); Entrepreneur-in-Residence Program (through both the Office for Innovation Development and Commercialization & the Small Business Development Center. Small Business Development Center; Office for Innovation Development and Commercialization

Library instruction is provided for students in entrepreneurship classes.
Outreach librarians are regularly meeting with the iZone director to knit entrepreneurial thinking and work into courses, assignments, etc. Also, the iZone director meets with the Academic Engagement Team, regularly, connecting them to the front-facing support services across the library system.

Some background on entrepreneurship programs here: the first program was an interdisciplinary minor in entrepreneurship. Next came a graduate certificate program. In fall of 2016, the College of Business added a Ph.D. program in entrepreneurship. A B.S. in Entrepreneurship was approved in July 2016 and is included in the 2017–18 catalog.

The College of Business has not had permanent leadership in the dean’s office for at least three years so it has been difficult to establish relationships that might lead to a greater understanding of the needs for new resources/services and potential financial support from them.

The Law and Entrepreneurship Clinic receives the same amount of support as all our other programs and all our other patrons. They have access to all the libraries, resources, materials, and services. We hope to strengthen our connection with them via more sessions teaching them about these services soon. The Business Library has assisted various campus entrepreneurial groups and individuals for over 20 years.

The library provides a lot of support through reference and instruction activities, but there are few services dedicated only to entrepreneurship needs.

The support for entrepreneurship has grown out of an awareness of the entrepreneurial climate at the university. No one told me to go out and make contacts, see what was happening. I initially was invited by a management professor to participate in a grant-seeking process and from there realized how much the libraries could offer. I find that if I talk to people, most are enthusiastic to learn how the libraries can support them. It takes a lot of outreach, sometimes after 5:00 p.m., to get this to grow.

This is a year of transition regarding the involvement of the library in entrepreneurship, which is a priority for the university, and consequently for the library.

Very large and dispersed campus (3 campuses, 44 libraries, 88,000FTE). Very collaborative working style within library and among librarians. Interdisciplinary audience, relatively new central office and more established accelerators and other players on campus. Coordination, lack of branding/awareness about entrepreneurship on campus.

We are just starting to discuss entrepreneurship program.

We support prototyping by providing supplies, but not full production.

With respect to staffing, things have evolved a bit here. The entrepreneurship librarian is firmly embedded in the entrepreneurial ecosystem, but his role has changed over time and now includes coordination of the library’s maker space. Many of the same stakeholders across campus have an interest in both entrepreneurship and the innovative activities supported by a maker space. Furthermore, a range of newly hired librarians have been helpful in supporting research and reference in this area although they were not specifically hired for that purpose. These include the GIS librarian and the data services librarian. Also, with respect to electronic resources, the business library already subscribed to most of what was needed for entrepreneurial students and faculty, although we did pick up a couple of additional resources. Licensing and non-commercial use has been an issue that business libraries have always grappled with and we are looking for ways to both meet the needs of our users and respect the demands of the vendors. We have amended agreements to specifically allow access for the technology transfer office, for example, and we may need to pursue more of these types of arrangements in the future. Finally, with respect to who can use our resources, all members of our community can use most of our electronic resources on a walk-in basis. This is consistent with our principles as a land-grant university. Remote access, however, is only available to faculty, staff, and currently enrolled students (not alumni or the general public).
Responding Institutions

| University at Albany, SUNY                  | University of Louisville                  |
| University of Alberta                      | University of Manitoba                    |
| Boston University                          | University of Maryland                    |
| Brigham Young University                   | University of Massachusetts, Amherst       |
| University of British Columbia             | University of Michigan                    |
| Brown University                           | Michigan State University                 |
| University at Buffalo, SUNY                | University of Missouri                    |
| University of Calgary                      | University of Nebraska—Lincoln             |
| University of California, Irvine           | New York University                       |
| University of California, Los Angeles      | North Carolina State University           |
| University of California, San Diego        | Northwestern University                   |
| Case Western Reserve University            | Ohio University                           |
| University of Chicago                      | Ohio State University                     |
| University of Colorado at Boulder          | University of Oklahoma                    |
| Colorado State University                  | Oklahoma State University                 |
| Duke University                            | University of Oregon                      |
| Emory University                           | University of Pennsylvania                |
| University of Florida                      | Pennsylvania State University             |
| Florida State University                   | University of Rochester                   |
| Georgetown University                      | Syracuse University                       |
| Georgia Institute of Technology            | University of Tennessee                   |
| University of Guelph                       | Texas A&M University                      |
| University of Illinois at Urbana-Champaign | University of Toronto                     |
| University of Iowa                         | University of Virginia                    |
| Iowa State University                      | Virginia Tech                             |
| Johns Hopkins University                   | Washington State University               |
| University of Kentucky                     | University of Waterloo                    |
| Université Laval                           | University of Wisconsin—Madison           |
| Library of Congress                        | Yale University                           |
| Louisiana State University                 | York University                           |
Representative Documents
Programs, Centers, Incubators
BOSTON UNIVERSITY
Buzz Lab
http://questromworld.bu.edu/entrepreneurship/buzzlab/welcome/
Empowering engineers to drive innovation.

The Institute for the Global Entrepreneur at UC San Diego encompasses a series of programs, centers and initiatives all working toward a common goal: preparing engineers to become change makers and technical leaders who drive innovation within organizations both large and small.

Get involved as a mentor
Create a custom program for your organization.

News from the Institute

May 23, 2017
New UC San Diego Technology Accelerator Selects Five Teams for its Inaugural Cohort

Today the Institute for the Global Entrepreneur (IGE) at the University of California San Diego announced team selections for its new technology accelerator. Five UC San Diego research teams, with innovations ranging from advanced healthcare diagnostics and medical device technologies to next-generation LIDAR for autonomous vehicle navigation, have been selected to join the new campus program. Full Story
DUKE UNIVERSITY
Center for Advanced Hindsight
http://advanced-hindsight.com/startup-lab/

**ÜBANK**
Übank is a mobile app that helps college students in Latin America take control of their spending and save for the things and experiences they love.
http://ubankaap.com

**SYNAPSE**
Synapse is building a push notifications product that helps people be less distracted and more productive. Using a combination of behavioral economics and machine learning, we categorize and schedule every notification a person gets, to optimize for relevance and delight.
http://synapse.ly/

**MEET OUR MENTORS**

- **Cella Hodent**
  Director of User Experience
  Epic Games

- **Julie Grundy**
  Information Architect
  Duke CIFT Web Services

- **Michael Norton**
  Professor of Business
  Administration (Marketing Unit)
  Harvard Business School

- [Image of mentors]
Creating Collisions

Bringing creators together to spark innovation

At the Innovation Hub, the idea of bringing together creative people infuses everything from the design of the building to the workshops, panel discussions, receptions and other events that make this incubator program unique.

800+ New Jobs

Since the building opened, startup companies have created 800+ jobs, contributing to the local economy.

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Jonathan Rowe - CEO, Neuronet

http://floridainnovationhub.ufl.edu/
Events for Residents*

The Innovation Hub is more than a building. Events such as workshops, panel discussions and networking receptions, team meetings and current CEO Talks, among other events, will help you gain the knowledge and connections you’ll need through these experiences. You’ll also learn about different startup companies through these events.

Increase your chances of success

Your startup will have a significantly better chance of success with the resources and tools we offer. According to the National Business Incubator Association (NBIA), 90 percent of startups can succeed with incubation services—two to three times the national average. To increase your chances of success, submit the initial application form. Once we have received it, we will contact you to discuss the next step in the application process.

How to apply
FLORIDA STATE UNIVERSITY
Jim Moran School of Entrepreneurship
http://jimmoranschool.fsu.edu/

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THE NATION'S FIRST STAND-ALONE ENTREPRENEURSHIP SCHOOL AT A PUBLIC UNIVERSITY

FSU's Great Give: Entrepreneurship Case Competition Club
"THANK YOU so much for your generosity and unselfish contributions during last week's Great Give. The number and dollar amount of gifts received during the 36-hour campaign was very impressive and heartwarming!...

Susan Florito

Panama City now accepting applications for fall 2017
The Jim Moran School of Entrepreneurship at FSU Panama City is designed for those who wish to embark on an entrepreneurial journey. Students must complete an application for the Jim Moran School at Panama City by June 25, 2017.

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http://www.uoguelph.ca/cbase/thehub

The Hub Incubator Program

Whether for-profit or not-for-profit, you can receive the support to grow or begin your startup. The Hub offers UofG students and alumni funding, dedicated office space and access to experienced entrepreneurs. The Hub focuses on helping startups develop a strong business model that can be rigorously tested and intelligently scaled.

The program is available to University of Guelph students and alumni working on innovative projects. Eligible teams must have at least one co-founder who is a current University of Guelph student or alumnus between the ages of 18 to 29. The Hub focuses on businesses in the beverage and food, life sciences, agriculture or social enterprise sectors but all ideas are welcome.

Teams accepted into The Hub are required to complete at least 30 hours of work each week and receiving full funding will be based on teams meeting certain requirements.

The Hub Offers

- **Funding**: $10,000 grant to help expedite growth
- **Mentors**: Access to experienced entrepreneurs
- **Business Services**: A network of accessible professionals
- **Resources**: Tools and expertise to support growth
- **Office Space**: Inspiring work and meeting spaces
- **Entrepreneurial Workshops**: Learn about trends, tools and potential topics

*“The Hub was an excellent experience for Redtree Robotics. Once we entered the Hub, the backing of the program caused more people to pay attention to us. It also focused our objectives and shifted away from only thinking about technology. They kept us motivated and on track by helping us set our goals and think and plan during each meeting. The $10,000 was helpful since it helped us build the initial prototype and ultimately, converted us to FounderLab.”*

Jason Ernst
Redtree Robotics Co-Founder
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START A BUSINESS
ATTEND AN EVENT
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NORTH CAROLINA STATE UNIVERSITY
Technology Incubator @ Centennial Campus
https://techincubator.ncsu.edu/

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Unlike other university-based technology incubators, ours is open to all parties, not just university-related spin-offs.

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celito.net
CENTER FOR INNOVATION AND ENTREPRENEURSHIP

The Ohio State University Center for Innovation and Entrepreneurship is an official academic center of the Ohio State University housed at the Fisher College of Business.

Innovation and Entrepreneurship

Because leading brands are increasingly employing innovation processes for new product and service development and creation to achieve sustainable differentiation and long-term viability, both business schools and businesses need to:

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- Partner with one another through research, training, and development focused on new processes for ideation, incubation, and commercialization
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PENNSYLVANIA STATE UNIVERSITY
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http://lionlaunchpad.psu.edu/

Lion LaunchPad is a business accelerator program that helps student entrepreneurs turn innovative product and service concepts into viable startup companies by offering mentoring, work space, and micro-grants. We support students in all majors as they develop the entrepreneurial mindset, skills and desire to look for opportunities for innovation and positive change.
Special Living Option beginning fall 2017

First-year students from any college now have the opportunity to participate in a Special Living Option (SLO) and explore innovation and entrepreneurship alongside like-minded students.

Students interested in the Lion LaunchPad SLO for fall 2017 should indicate their preference in eLiving before May 15.

Learn more at Penn State News.

Student Entrepreneurs in Action

Read the stories of student teams that were recently awarded Lion LaunchPad grants. Best of luck to them as they continue to grow their businesses!

What’sPoppin | DezComp | Parking Bee | Someone New | Musical Minds
Blackstone LaunchPad is a campus-based experiential entrepreneurship program open to students, alumni, staff, and faculty, offering coaching, ideation, and venture creation support.
SYRACUSE UNIVERSITY
Blackstone Launchpad
http://launchpad.syr.edu/

SERVICES

COMPETITIONS
Campus challenges, as well as national, state and regional business plan competitions that provide opportunities for students from across the network to connect and innovate.

COWORKING
Campus-wide accessibility to open coworking spaces, specialized applications and tools to help startup off the ground and scale, with a focus on inclusive entrepreneurship.

NETWORKING
Events that build an innovation infrastructure, bringing together entrepreneurs, researchers, investors and funders, as well as technical service providers.

COACHING
One-on-one mentoring that cultivates entrepreneurial thinking and problem solving for both non-profit and for-profit businesses of any size and industry.

WORKSHOPS
Technical assistance programs that build competence through experiential learning, and referral to highly ranked Syracuse University entrepreneurship education programs.

CONNECTIONS
Regional, national and global connections to university programs and venture leaders to share best practices, engage with successful entrepreneurs, and find network partners.

TESTIMONIALS

The Blackstone Launchpad has given us the setting and the resources to critically think through and solve the challenges we face as a startup. For our team, this space makes magic happen – it is a second home.

~Ryan Brinkerhoff, Thrive Project
TEXAS A&M UNIVERSITY
Startup Aggieland
http://startupaggieland.com/

Access
Apply for non-free furnished offices with many 8-foot white boards or access to coworking space. Enjoy 24-7-365 secure ID Card access. Free use of large kitchen with Keurig coffee maker, air ice machine, refrigerator, microwave and Red Bull cooler. Free parking by entrance. Free use of large conference room with 8-foot white board, seating for 18; two 60" TVs with Skype setups; and Polycom conferencing with microphones. Free business address says "Aggie." Obligatory ping-pong table!

Perks
Free WiFi and cloud hosting up to $100,000 annually from Softlayer, Google, Microsoft or Amazon. Free developer tools from Microsoft Azure or IBM Bluemix. Free legal services from pro bono attorneys with the Texas A&M School of Law and also at prominent law firms like Andrews Kurth, Duane Morris, Wilson Sonsini and Norton Rose. Free accounting assistance. Free marketing support and reduced-rate graphics/animation services. Free use of meeting space for 70. No leases, no hassles.

Mentors
Our mentors "make it happen!" With 100 dedicated and "on-call" mentors, subject matter experts, award-winning faculty, CEOs/CFOs, Young Entrepreneurs-in- Residence and other highly-qualified mentors in our stable, Startup Aggieland offers unparalleled networking and influence. Two affiliated investment funds, an on-site angel group and proximity to a global Tier One, Top Ten Research Institution means our startups can leverage public and private resources worldwide.

Location
Conveniently located in Texas A&M University’s scenic Research Park, Startup Aggieland occupies 5,000 sq. ft. of Class A office space in the Castwell/Schulzeberger Building. Our offices overlook a small lake with hiking trails, BBC jobs and a Hobee Golf Course. No personal transportation? No problem: Startup Aggieland is served by Shuttle Bus 5 (Bush Library) and features a covered bus stop in front of our facility. Free year-round parking for office tenants. Within walking distance of Hullabaloo Hall.

THINK GLOBALLY. ACT LOCALLY.

Startup Aggieland is a globally-recognized, award-winning, pre-acceleration program disguised as a multidisciplinary business accelerator. A testimony to the American Dream, our business accelerator accepts client companies that want to change the world, make a real difference in people’s lives and create value where none previously existed. Students, staff and faculty – as well as former students – are eligible to apply for mentoring and resources as clients of Startup Aggieland. Applications are competitive and require participation in a rigorous Lean Startup program.
ENTREPRENEURSHIP AS A CAREER CHOICE

Where will your entrepreneurial journey take you?

Take the road less traveled.

CENTER FOR NEW VENTURES AND ENTREPRENEURSHIP (CNVE)

Since its inception in 1998, the Center for New Ventures and Entrepreneurship (CNVE) has served as the hub of entrepreneurship at Texas A&M University. CNVE enhances the student experience by providing education, training, networking and resources for entreprenuing students, faculty, veterans and former students.

GET PLUGGED IN AS A MEMBER OF ENTREPRENEURSHIP SOCIETY

A recognized student organization at Texas A&M University, E-Society is the front door for students to explore entrepreneurship. Leadership positions are available. E-Society's annual signature event is Startup 101. The student-managed three-day workshop is open to the public. E-Society also hosts speakers and social events.

3-DAY STARTUP / TEXAS A&M

3-Day Startup is an extreme launch experience, open to all majors and levels of study at Texas A&M University. Staged at Startup Aggieland each fall and spring, students form teams and develop products, then pitch to investors at a public networking event. 305 is free for students, including all meals and snacks at the 12-hour event.

UNIVERSITY / POST OAK MALL COLLABORATIVE (UPC)

Startup Aggieland's UPC is a "pop-up" retail incubator – the first retail incubator in our state. In partnership with Mays Business School's Center for Retailing Studies and CBs, Management in Waco, owner of PostOak Mall, the UPC opened in June 2015 with our client Lynx Toys, which has since sold more than 25,000 pool noodle connectors.

STARTUP AGGIELAND SEED FUND

Student-driven, the Seed fund offers non-dilutive grants for student ventures. Startup Aggieland requires no equity or IP ownership in return, but we hope you'll pay it forward:

- Company client of Startup Aggieland
- Academically-eligible TAMU student
- Proven commitment to the company success with evidence of results

TEXAS A&M UNIVERSITY
Startup Aggieland
http://startupaggieland.com/
UNIVERSITY OF TORONTO
Entrepreneurship
http://entrepreneurs.utoronto.ca/
UNIVERSITY OF TORONTO
Entrepreneurship
http://entrepreneurs.utoronto.ca/
WHAT IS ENTREPRENEURSHIP AT VIRGINIA TECH?

Purposeful, positive change to society is not possible without the cultivation of thoughtful leaders and enterprising minds. At Virginia Tech, our mission is to do just this, by inspiring and preparing students to turn their passion and ideas into action. We strive to create a culture that unleashes creativity, sparks vision and innovation, and instills in tomorrow's leaders the entrepreneurial mindset and skill set that will enable them to truly invent the future.
WHERE INNOVATION STARTS

Virginia Tech is a world leader in interdisciplinary education and collaborative innovation. Our mission is to foster a love of learning and service to our community, both local and global. We support every stage of an entrepreneur’s journey from research to commercialization. But Virginia Tech is more than about starting businesses. We enable our students to create knowledge and to apply it to the needs of an interconnected world.

RESOURCES

Networking  Product Design  Working Spaces  Education  Funding & Legal

Apex Systems Center for Innovation and Entrepreneurship
The premier resource for Virginia Tech students, alumni and faculty innovators and entrepreneurs.

Roanoke-Blacksburg Technology Council
Promoting the growth of the region’s technology sector.

Entrepreneur Club (E-Club)
The Entrepreneur Club at Virginia Tech brings students together to build world-changing ideas.

@ the NExus
Virginia Tech’s innovation and entrepreneurship summit.

Virginia Tech Intellectual Properties, Inc.
Licenses technologies developed by Virginia Tech faculty, staff, and students.

inVenTs Living Learning Community
An interdisciplinary living-learning space for students interested in transforming innovative ideas.

VT KnowledgeWorks
Services to help entrepreneurs plan, launch, and grow a business.

National Science Foundation iCorps
Fostering entrepreneurship that will lead to the commercialization of NSF-funded research.

Technical Assistance Program
Connecting faculty members to market needs and the businesses who can utilize them.

Northern Virginia Technology Council
Connecting, growing, educating, and advocating for the innovative and entrepreneurial technology community in Northern Virginia and the greater region.

Innovate Living Learning Community
Discovering, preparing, and connecting the next generation of entrepreneurial leaders.

Virginia Tech National Capital Region
Dedicated to furthering the university’s education, research, and outreach in the Washington, D.C. metro area.

Virginia Tech Office of Economic Development
Developing the capacity of communities and the university to support technology, talent and entrepreneurship.

Startup Weekend
Where Blacksburg comes to build skills, meet incredible people, and launch successful startups.
ENTREPRENEURSHIP

IT’S IN OUR DNA

Waterloo is an entrepreneurial ecosystem where technological leaders and startup founders share the same goal: to bring innovative and world-changing ideas to the global marketplace.

A FULL SPECTRUM OF SUPPORT

Hundreds of companies and thousands of student success stories trace their roots to Waterloo’s one-of-a-kind entrepreneurship ecosystem — fuelled by creator-owns intellectual property policy, experience-rich learning in the world’s largest co-operative education program, and a bold, progress-driven culture that embraces innovation and risk.

UNIVERSITY OF WATERLOO
Entrepreneurship
https://uwaterloo.ca/entrepreneurship/
EXPLORE OUR OPPORTUNITIES

There's no one-size-fits-all definition of an entrepreneur. That's why University of Waterloo offers a full spectrum of support, from the early stages of inspiration and discovery, to the incubation and acceleration of commercial and social ventures. Entrepreneurs thrive here.

- Velocity
- Entrepreneurship Society (EntSoc)
- Conrad Business, Entrepreneurship and Technology Centre
- Research Entrepreneurs Accelerating Prosperity (REAP)
- Engineering Innovation
- Waterloo Commercialization Office (WarCn)
- St. Paul's GreenHouse
- Accelerator Centre
- Stratford Digital Media Campus

BY THE NUMBERS

- 30+ support and for-credit programs in the entrepreneurial ecosystem
- 175+ companies established through Velocity
- $425M in funding raised by Velocity companies

https://uwaterloo.ca/entrepreneurship/
LaunchYU - Advancing Entrepreneurship at York University

LaunchYU is York University’s entrepreneurship program, where entrepreneurs across campus and in the surrounding community can:

CONNECT . COLLABORATE . LEARN . SUCCEED

If you’re interested in exploring entrepreneurship as a viable career option, or if you have an idea for a business and need assistance in getting started, LaunchYU is the place for you.

LaunchYU Events and Workshops

LaunchYU AccelerateUP Program

YORK UNIVERSITY

http://www.launchyu.ca/
Library Resources
Entrepreneurship: Getting Started
http://guides.library.ubc.ca/entrepreneurship
The Small Business Accelerator offers free online access to reliable business information and tools for secondary market research for BC businesses and entrepreneurs. This initiative is led by UBC Library's Irving K. Barber Learning Centre.
Recent Blog Posts

Accelerate Your Learning with Video Tutorials
Thursday, May 18, 2017
Want to learn how to define your business structure, use social media for your business or sharpen your Excel skills, but don't have time to take a course? No problem! With the growth of online...

Support for Social Enterprises
Monday, May 1, 2017
What do British Columbians value? Making positive impacts—and the social ventures sector is certainly thriving in British Columbia. According to the BC Social Venture Sector Labour Market Study, 2015...

Making the Pitch: How Research Can Build Credibility
Wednesday, April 19, 2017
You've got "THE" business idea that you're convinced will be a success. But how can you convince your audience? With research! Prove you know the competition. A good starting point is...

More Posts >

Small Business Accelerator Program
UBC Library, Vancouver Campus
Irving K. Barber Learning Centre
1901 East Mall
Vancouver, BC Canada V6T 1Z1
E-mail sba.ubc.ca
Website sba.ubc.ca
Back to top
Entrepreneurship: Getting Started

A guide to resources for both community-based and UK-affiliated entrepreneurs.

Introduction

This research guide is designed for use by both community-based and UK-affiliated entrepreneurs.

If you are not affiliated with the University of Kentucky (as faculty, staff, or student), you will have to come to one of our campus locations in order to access most of the electronic resources. Community members who are Kentucky residents and over 18 years of age can get a library card and check out materials.

Books

Encyclopedia of New Venture Management by Matthew R. Marvel (Editor)
Publication Date: 2012

New ventures are often launched into highly dynamic environments characterized by rapid technological change, intense unpredictability, and an uncertain cash flow. While new ventures offer those who initiate them a high degree of independence, excitement, and potential for great reward, they also bring high risk, stress, and greater potential for failure. Thus, it takes a special set of skills, techniques, and temperament to succeed. These skills, along with the potential risks and rewards of environmental settings and characteristics, are explored in the Encyclopedia of New Venture Management.

Online Resources

- Encyclopedia of Small Business
Entrepreneurship

http://libguides.uky.edu/entrepreneurship

- Kentucky Chamber of Commerce

Local Small Business Advising

Commerce Lexington

Commerce Lexington, Inc. is a nonprofit, public-private economic development partnership representing the Lexington MSA. At Commerce Lexington, everything we do is aimed at helping business owners succeed by equipping them with the tools they need to grow or expand their business.

AMERICA'S SBDC KENTUCKY

- Kentucky Small Business Development Center

The KSBD provides unparalleled consulting and training services that help existing business owners and potential entrepreneurs succeed. Our services include: one-on-one management consultations, training workshops, market research, loan packaging help.

The Entrepreneur's Guide to Business Law by Constance E. Bagley; Craig E. Daughtery
Call Number: KF390.56434 2003 - Law Library
Publication Date: 2002
This book contains 17 chapters that follow the progression of a start-up business and anticipate its legal concerns through the stages of growth up to an initial public offering.

Exploring Entrepreneurship by Richard Blundell; Nigel Lockett
Call Number: HB616. B607 2011
Publication Date: 2011
Exploring Entrepreneurship examines the nature of entrepreneurial activity in the 21st century, and aims to help students develop the skills and knowledge required by commercial and social entrepreneurs.

The Lean Startup by Eric Ries
Call Number: HD625.9 .R55 2011
Publication Date: 2011
The Lean Startup offers entrepreneurs - in companies of all sizes - a way to test their vision continuously, to adapt and adjust before it's too late. Ries provides a scientific approach to creating and managing successful startups in a age when companies need to innovate more than ever.

Models of Opportunity by Gerard George; Adam J. Bock
Call Number: eBook
Publication Date: 2012
Links scholarly research on business models and organizational design to the reality of building entrepreneurial firms. It provides actionable advice based on a deeper understanding of how business models function and change. The insights, tools, and cases, provide a fresh perspective on emerging trends in entrepreneurship, organizational change and high-growth firms.

Small Business Sourcebook by Mit, Sonya D.
Call Number: HD2346.55 S85 2008
Publication Date: 2008
In this annual two-volume annotated guide, you’ll discover more than 27,000 listings of live and print sources of information designed to facilitate the start-up, development and growth of specific small businesses, as well as more than 29,000 similar listings for small business topics.

- Small Business Reference Center (includes description)
Offers full-text periodicals and reports, sample business plans, U.S. tax forms, videos and reference books.

- Business Owner's Toolkit
With an emphasis on problem solving, BizFilings Business Owner's Toolkit offers more than 3,000 pages of free cost-cutting tips, startup advice and business templates to small business owners and entrepreneurs.

- Start Your Own Business: 50 Things You'll Need to Do
The more you know about starting a business, the more power you have to form an organization that develops into a lasting source of income and satisfaction. For help with the beginning stages of operating a business, the checklist on this website is a great place to start.

Look for other Research Guides
If you are looking for information on other subjects please take a look at all of the research guides created by our librarians:

- Alphabetic List of Research Guides by Subject
### Journal, Magazine, Newspaper Articles - Current news about companies, industries, markets, products

<table>
<thead>
<tr>
<th>Database</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Source Premier</td>
<td>Trade journals, business magazines, 8,000 plus indexes. Exclusive provider of B2B &amp; B2C data.</td>
</tr>
<tr>
<td>LexisNexis Academic</td>
<td>Daily newspapers, newsletters, wire, TV broadcast transcripts - for local and regional news.</td>
</tr>
<tr>
<td>Massachusetts Newsbank</td>
<td>Daily newspapers from eight Massachusetts cities, plus weekly business newspapers.</td>
</tr>
<tr>
<td>Regional Business News</td>
<td>Weekly business newspapers from regions and cities across the US.</td>
</tr>
</tbody>
</table>

### Environmental/Social Policy Reports

<table>
<thead>
<tr>
<th>Database</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability Watch</td>
<td>Brief reports on 200+ sustainable business topics.</td>
</tr>
<tr>
<td>PolicyFile</td>
<td>Reports from think tanks and policy institutes.</td>
</tr>
</tbody>
</table>

### Industry Reports - Macro-analysis of industry conditions, performance & strategy

<table>
<thead>
<tr>
<th>Database</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBISWorld Reports</td>
<td>Reports for every NAICS industry, based on Porter's Five Forces analysis.</td>
</tr>
<tr>
<td>First Research</td>
<td>Analysis from a market strategy perspective. Screen industries by performance.</td>
</tr>
<tr>
<td>S&amp;P Industry Surveys</td>
<td>Standard &amp; Poor's industry analysis from an investment risk perspective.</td>
</tr>
<tr>
<td>Plunkett Research Online</td>
<td>Industry data &amp; analysis for 30 economic sectors; top companies, market rankings.</td>
</tr>
</tbody>
</table>

### Market Reports - Consumers market analysis - Trends & preferences

<table>
<thead>
<tr>
<th>Database</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mintel Oxygen</td>
<td>Retail markets, technology, consumer lifestyle, hospitality, leisure and tourism markets.</td>
</tr>
<tr>
<td>MarianResearch.com</td>
<td>Manufacturing, computers, electronics, finance, food, healthcare, drugs, retailing, telecom.</td>
</tr>
<tr>
<td>Forrester Research</td>
<td>Focus on internet markets - business applications and consumer trends. Decision tools.</td>
</tr>
<tr>
<td>Faulkner Advisory on IT</td>
<td>IT infrastructure, telecom, wireless and data networks, convergence, security, internet.</td>
</tr>
<tr>
<td>Passport GMID</td>
<td>Consumer market reports &amp; data for every country worldwide. Historical, current, forecasts.</td>
</tr>
<tr>
<td>Plunkett Research Online</td>
<td>Market data for 30 economic sectors, top companies, market rankings.</td>
</tr>
</tbody>
</table>

### Company Reports - Facts, history, operations, products, revenues, competitors, leadership

<table>
<thead>
<tr>
<th>Database</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG Manager on Campus</td>
<td>Analysis of the environmental, social, governance performance of 6,000 global firms.</td>
</tr>
<tr>
<td>Mergent Online</td>
<td>Financial analysis of public companies worldwide. 15 yrs. financials, SEC filings.</td>
</tr>
<tr>
<td>Hoover's Company Profiles</td>
<td>Brief reports - 14,000 companies - background, products, revenues, competitors.</td>
</tr>
<tr>
<td>LexisNexis Company Dossier</td>
<td>Public and private company profiles - reports, data, litigation, competitors.</td>
</tr>
<tr>
<td>Directory of Company Histories</td>
<td>Essays, corporate chronologies on the World's largest, most influential companies.</td>
</tr>
</tbody>
</table>

### Company Directories - Locate customers, competitors, suppliers - by type of business, location, size

<table>
<thead>
<tr>
<th>Database</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D&amp;B Million Dollar Database</td>
<td>Directory of all US &amp; Canadian companies. Search by type, location, size.</td>
</tr>
<tr>
<td>Corporate Affiliations</td>
<td>Corporate family tree for 200,000 US and international companies.</td>
</tr>
<tr>
<td>Sports Market Place Directory</td>
<td>Directory of sport organizations, media, sponsors, events, retailers.</td>
</tr>
<tr>
<td>Venture Capital &amp; Private Equity</td>
<td>Directory of 2,300 firms - executives, investment amount, criteria, stage, fund size.</td>
</tr>
</tbody>
</table>
Selma D. and Stanley C. Hollander MakeCentral: Makerspace

Hollander MakeCentral is an alternative learning environment and gathering space that encourages cross-discipline collaboration, experimentation and learning. All students, staff, faculty and community members can use the space for maker projects and activities. Our space encourages hands-on and social learning about new technologies and techniques.

Access

All students, faculty, staff and non-MSU affiliated patrons can submit files to be 3D printed, laser, or vinyl cut using Hollander MakeCentral 3D machinery. Fill out the submission form related to your request and staff will consult with you about pricing and completion date. All prints and cuts will be performed in the order they are received and may take a few days depending on order volume. Items printed from the Library 3D printer not picked up within 14 days after being printed become the property of the Library.

If you have questions, you can email MakeCentral Staff or call (517) 884-0844.
Open House: What’s a Makerspace?

Location: Selma D. and Stanley C. Hollander MakeCentral

April 15th 11:00 AM – 4:00 PM

In this open house, Hollander MakeCentral will open its doors and open minds showing how to use cutting edge technologies to go from idea to invention. 3D Printing and Scanning, Programmable Circuitry, and Play-Do and Legos (yup!) will all be showcased in this drop-in all ages event.

Software

Meshmixer

Tinkercad

123D Design

Skanect

Arduino

123D Catch

Autodesk Fusion 360

Thingiverse

Make Central Features

Spring 2017 Classes and Workshops

Sign up today for a free workshop at the library. Sign up early, as most classes have limited enrollment. Offered this semester:

- Citation Management - Endnote X6 and Endnote Online, Mendeley, and Zotero
- Digital Scholarship - audio and image analysis, Beatline, Podcasting
- Make Central
- GIS programs - compass navigation and QGIS
- Desire2Learn, ZOOM, and MediaSpace

View or search all of MSU Libraries’ Features | View Business Library Features
Entrepreneurship & Innovation

Resources to support the ENTI Minor and other entrepreneurship study

Overview

The advantage of business and marketing information in entrepreneurial pursuits cannot be overestimated. Knowledge, facts and data, appropriately applied, are powerful and advantageous. This guide is created and updated to provide the best the University Libraries can offer in several key areas, as noted in the navigation links to the left, for investigating markets, developing innovative products and services, and planning a business.

Our priorities in making this guide available are as follows:

- Support for the Entrepreneurship & Innovation (ENTI) cross disciplinary entrepreneurship minor
- Support for other curriculum-connected student entrepreneurship projects.

We will provide information support for entrepreneurship research that is not connected to Penn State curriculum. However, use of most of our online resources is restricted by license agreements which prohibit such use. Researchers whose purposes are for-profit or non-educational will be directed to resources that are not restricted.
Entrepreneurship support

University of Toronto libraries supports campus entrepreneurs enrolled in courses and programs, commercializing research, and launching startups on their own or via a campus accelerator.

For more information or questions about anything on this page, please contact Entrepreneurship Librarian Carey Toome.

Research tools and support

Entrepreneurship research guide
Whether you're new to commercialization or an experienced entrepreneur, this guide is a quick and easy way to access the most useful resources the library has to offer, including market research, journals, books, toolkits, and information on financing and business plans.

Entrepreneurship databases
An A-to-Z list of databases useful for entrepreneurship research by students, faculty and staff.

Introduction to patents and patent searching
This guide is designed to introduce you to patent searching. Basic patent information as well as useful resources are included to help you get started.

Standards and Codes research guide
Define, search, locate, and cite standards and codes across a broad range of engineering disciplines and manufacturing sectors and industries.

Request research help
Librarians are available to support your research via email or in-person consultation or referral.

Campus resources, space and equipment

Campus startups 101
How to U of T Thinking about launching a startup? Wondering what an accelerator is, or where you can find a 3D printer? Start with this guide.

Launchpad Campus resources for U of T startups
An orientation session offered each semester covering everything from accelerators to workshops to help you get your venture off the ground at U of T.
Workshops and instruction

The library offers a number of workshops related to entrepreneurship research.

Entrepreneurship research workshops
Open workshops offered through the library. Topics range from an introduction to business research to market sizing, primary research strategies and tools, datasets for entrepreneurs, and finding a startup job. Eligible for recognition on your Co-curricular record.

Research commercialization for graduate students
Includes an introduction to invention disclosures and research commercialization processes at U of T, as well as an orientation to campus resources and business research. Part of the Graduate Professional Skills workshop series offered by the School of Graduate Studies.

3D printing safety training
Complete this safety training workshop in order to gain access to the 3D printers housed at the IMACLab at Gerstein Science Information Centre.

Plus: Faculty and instructors can request instructional support on library market research resources by contacting Entrepreneurship Librarian Casey Tsane.
Find out more about how librarians support teaching.

Community links

The University of Toronto Entrepreneurship Office manages an event calendar or subscribe to their newsletter.

The Business Information Centre at the Rotman School of Management offers support for business research including entrepreneurship.

The Innovations & Partnerships Office (IPO) helps build successful partnerships between Industry, business, government, and the University of Toronto research community and manages U of T’s portfolio of intellectual property.

As the regional innovation centre for Toronto, MaRS Market intelligence supports U of T startups with a variety of programs and services including the Startup Library and regular events.

Toronto Public Library provides access to business databases and online research tools for residents of Toronto.
A Guide for Entrepreneurs

Creating your own start up? Looking to change the world? Want to know if your idea is patentable? Let this Library website be your guide.

Who is This Guide for?

This guide is intended to help Waterloo’s entrepreneurs - from Velocity residents to Engineering students working on a profitable 4th year design project to Arts students preparing for a fund pitch to anyone with an entrepreneurial interest.

The guide is aimed at current Waterloo students, so if you are from a different demographic and require assistance contact Rachel Figueredo under the Help and More tab of this guide.

How Will This Guide be Helpful?

Many entrepreneurs don’t look in to the current marketplace or patent landscape for their project until they are near completion. Don’t make the same mistake! Research is important to the success of any business or product. Use this guide to connect with the Library’s powerful research databases and develop new ideas based on existing resources.

Navigating This Guide

To make the most of this guide, follow the tabs in order, reading the top-level tab and the tabs beneath it before moving on to the next tab and the sub-tabs beneath it before moving on to the next two tabs. Here’s an overview of the information you’ll find in this guide:

- Home Tab - Search strategies necessary to harness the power of scholarly research databases;
- Factiva: A Basic Guide - Detailed instructions on using Factiva, one of the most useful sources of business information for Waterloo’s entrepreneurs;
- Research & Writing - A list of useful databases that Waterloo subscribes to, in order to start your search, as well as information on citing business sources;
- Assessing the Industry - Connect to other relevant Research Guides to help find company information, market research, and financials;
- Growing Your Startup - Are you looking for a mentor? Funding? A program or course to help you through the entrepreneurial landscape? Find your right fit here;
- Patent Searching - A quick look at what patents are, why you need them, and where to find them.


View this page in a format suitable for print, and screen readers on mobile devices.

UNIVERSITY OF WATERLOO LIBRARY
A Guide for Entrepreneurs
http://subjectguides.uwaterloo.ca/content.php?pid=671532
Patents and Trademarks: Overview

http://researchguides.library.wisc.edu/patents
Course Material
BUS436 Entrepreneurship & New Venture Development

Business Plans

- **Writing a Business Plan (U.S. Small Business Administration)**
  An excellent guide that walks you through and analyzes each section of the plan; particularly good for putting together financials.

- **SCORE Business Plans**
  SCORE “Counselors to America’s Small Business” is a nonprofit association dedicated to educating entrepreneurs and helping small business start, grow and succeed. Check this site for business plans for non-profits, start-ups, finance templates and more.

- **Entrepreneur.com Business Plans**
  Start-up Essentials/Business Plans

- **Inc.**
  Great section by section, step by step description; supplemented by articles from Inc. magazine.

- **Bplans**
  Does a good job of walking you through all the sections of a business plan; site includes examples of business plans, market plans, and mission statements, many for free.

- **Business Plan Samples**

Saira Razz

Email Me

120  Representative Documents: Course Material
The Business Model Canvas

Key Partners
- ProQuest
- Hoovers
- IBISWorld
- ThomsonReuters
- Gartner

Key Activities
- PrivCo
- Factiva
- eMarketer Pro
- Galt Directory Library

Key Resources
- LexisNexis Academic

Value Propositions
- Marketing
- Research

Customer Relationships
- LexisNexis Academic
- eMarketer Pro

Channels
- Business Desk Generation

Customer Segments
- Demographics Now

Cost Structure
- Bizminer
- IBISWorld

Revenue Streams
- Bizminer
- Gartner
Introduction
Rationale: Family and consumer Sciences curricular provide many opportunities for entrepreneurship and small business ownership in various product and service areas. In this course students will explore issues, challenges and opportunities related to entrepreneurship in areas such as apparel retailing, restaurants, hotel operations, and childcare. Issues related to family owned businesses, home-based businesses, and rural based enterprises will also be addresses. Independent business owners and industry representatives will serve as resources for panel discussions.

Course objectives:
- Identify characteristics of entrepreneurs, environmental conditions which foster entrepreneurship, and the role of entrepreneurs in the broader economy.
- Understand contributions of the family and Consumer Sciences profession to small business and entrepreneurship opportunities.
- Assess motivations for starting a small business, success factors and failure rates associated with independent business ownership.
- Evaluate personal and financial resources needed for starting a small business and sources of assistance for business start-ups. Identify funding sources that contribute to the capital base required for entrepreneurship.

Course Coordinator: Dr. Linda Neher
niehmen@iastate.edu
Office: 1066 LeBaron
Office Phone: 515 294-1930
BUS 170: Intro to Business Model Creation
Laura Leavitt ~ Guest Speaker: September 16, 2016

Business Model Canvas

Nine Building blocks:
- Customer Segments
- Value Propositions
- Channels
- Customer Relationships
- Revenue Streams
- Key Resources
- Key Activities
- Key Partnerships
- Cost Structure

CASE STUDY #1
Square is a provider of payments technologies for retail businesses. The company’s devices include the Square Reader and Square Stand and its software include Square Register, Market, Cash and Order (replacing Wallet).
1. VALUE PROPOSITION
- What value do you deliver to the customer?
- Which one of the customer’s problems are you solving?
- What bundles of products/services do you offer to each customer segment?
- Which customer needs are you satisfying?

2. CUSTOMER SEGMENTS
For whom are we creating value? Who are our most important customers?
- Mass Market
- niche market
- Segmented
- Diversified
- Multi-sided Platform

3. CHANNELS
Through which channels do our customer segments want to be reached?

4. RELATIONSHIPS
How will we get, keep and grow customers?

5. KEY ACTIVITIES
What key activities do our value propositions require?

6. KEY RESOURCES
What key resources do our value propositions require?

7. KEY PARTNERSHIPS
Who are our key partners?

8. REVENUE STREAMS
What is the revenue model? What are pricing tactics? For what value are our customers willing to pay?

9. COST STRUCTURES
What are the most important costs in our business model?
CASE STUDY #2

https://youtu.be/44s3VInnfrs

BMC w/ Library Resources

MSU Library Resources for BMC Building Blocks

Need more help?

Entrepreneurship & Small Biz Online Research Guide
http://libguides.lib.msu.edu/entrepreneur

Contact me!
Laura Leavitt
leavitt9@msu.edu
517-355-4647
Welcome to the EBV LibGuide!

This guide is here to help you discover the appropriate resources needed for entrepreneurial research while you’re at MU. Feel free to contact me after leaving campus if you have questions.

EBV Info Portal

Thanks to the generosity of numerous database vendors, EBV participants from all 10 institutions will have free access to highly valuable business research tools for the year they are in the EBV Program. Your EBV librarians have created the EBV Info Portal, where you can find the donated databases as well as many free websites which are always available. Check out this resource at the below link:

EBV Info Portal

Librarian

[Image of Librarian]
Outreach Materials
Introducing Weekly Jam Sessions

We learn best when we learn together!

Join your like-minded makers at our new weekly “Jam Sessions,” two-hour blocks set aside for focusing on a particular aspect of making.

While we may sometimes run structured workshops in this time period, usually Jam Sessions are casual, peer-to-peer learning events. You can get an introduction to the topic, learn a new skill, get help on a project, and connect with fellow makers to come up with new ideas and bring them to life in the Maker Hub. Makers of all skill levels are welcome. Jam sessions work best when the group has beginners, journeymen, and experts all hanging out together.

Note: During Jam sessions, the Maker Hub remains open to all other activity. You can still sew during Arduino Thursday, or 3D print on Woodshop Wednesday.

Jam Session Schedule

CNC Fabrication:

Tuesdays 3–7pm. Work with Vinyl cutters, the laser cutter and 3D printers. Share techniques for designing with software like Tinkercad, Adobe Illustrator, Fusion 360, and more. Show off your work and brainstorm new ideas with our CNC enthusiasts.

Woodshop:

Wednesdays 5–7pm. Learn how to use the Maker Hub’s power tools and hand tools. Learn and share techniques for working with wood and other traditional construction materials.

Be a Maker Hub Volunteer

Help us build our community of makers at Georgetown and expand our impact on campus by becoming a Maker Hub Volunteer Monitor! Volunteers get access to the space during non-open hours in return for working at least 2 hours per week in the Maker Hub.

Click here for details!

Tell Your Friends!

Please support the Maker Hub by spreading the word. Forward this email to friends, classmates, professors and fellow acolytes that might be interested. They will thank you later!
Get help on your projects, partner with other makers, and come up with new ideas.

**Arduino, Plex, and Electronics: Thursday 3-7pm.** Dive into the world of physical computing with platforms like Arduino and Raspberry Pi. Learn the basics of electronics and how to connect analog and digital worlds together. Get help with your projects, or get an introduction to a new tool or technology.

**Textiles: Fridays 3-7pm.** Learn how to knit, crochet, sew, weave, and more. Bring your jeans to repair, a pattern to make from scratch, or work with others to come up with new designs.

**We Take Donations!** Cleaning out the garage or closet? The Maker Hub is accepting donations of any tools, electronics, equipment, and supplies. It need not be working, but if the donation is large, let us know in advance. In particular we need:
- Lab coats, aprons, utility vests
- Vintage AV Gear
- Projectors, cameras, and anything with lenses
- Old video game systems
- Lego and other construction kits
- Thread, fabric, and sewing supplies
- Woodworking tools
- Scrap acrylic sheets and wood for the laser cutter

**Contact**
- Website
- Email
- Social Media

**Location**
First Floor, Lasker Library, Georgetown University

**Open Hours**
Mon, Fri, Sat: 11am-7pm
Tue, Wed, Thu: 3-7pm

**Join our Google Group!** Share ideas, find collaborators, ask questions, and keep up with all the goings-on in the Hub by joining our google group. Note: emails to the google group may be more frequent than our newsletter, but you can subscribe to a daily or weekly digest.
Code+Art Visualization Contest

ANNUAL CONTEST TO CELEBRATE THE WINNERS OF THE 2017 CODE+ART STUDENT VISUALIZATION CONTEST!

- Grand prize: Nathenie Brooks, "Burst of Color" (top left)
- Second: Tyler Mayberry, "Carnival Clay" (top right)
- Third: Simon Park, Julia Lineberry, Hilary Smith, Lucas Gargano, Conor Shipway, Nattanun Sumpakulak, & Monica Nguyen, "Paper/Swing VR" (bottom left)
- Honorable mention: Nicholas Beem and Matthew Meeks, "On the Origin of Fishes" (bottom right)

Read about the winning pieces in our news article!
What is it?
The NCSU Libraries is pleased to announce its third annual Code + Art Student Visualization Contest. Students are invited to create visualizations that may be data art pieces, procedural environments, or virtual reality experiences. Entries will compete for cash prizes and winners will be announced April 26, 2017.

Purpose
Libraries have long been places where people have explored new ways of interacting with information. We invite students to create visualizations that give visitors a taste of the possibilities that await them inside our Libraries.

What are we looking for?
We are looking for attractive visualizations that are created with a computer. Submissions in the following categories will be accepted:

- Data visualization / data art
- Generative art
- Procedurally generated environments (game environments, for example)
- Virtual or augmented reality experiences

Note: We are especially interested in “massively responsive” web-based work that could be displayed on the Hunt Library video walls.

Prizes
- First - $400
- Second - $200
- Third - $100

Winners are responsible for any tax implications. There is a greater impact on nonresident aliens who are subject to US tax of 30% for prizes and awards and additional State of North Carolina taxes. There are also several pieces of legal documentation required in order to process the payment for nonresident aliens (W-2/1099, visa, passport, I-94).

Who is eligible?
Any NC State undergraduate or graduate student enrolled during Spring 2017 is eligible to enter. Students may enter either individually or in groups. Groups may have both undergraduates and graduates within the same group. Students from all departments in the university are encouraged to enter. Students who graduated in December 2016 are ineligible.

Timeline
April 10, 2017 - Final deadline for entries
April 26, 2017 - Winners notified
Submit your entry

Need Help?
If you have any questions about the contest, available technology, resources, or making visualizations, contact Alison at alflore@ncsu.edu.
Make-a-thon Inspires Students To Solve Sustainability Challenges

Imagine you’re a college student who’s run out of your residence hall, swipe your student identification card at an email module or the nearest bike rack and start riding a borrowed bike to class.

That’s the idea behind ReCycle, a campus bike-sharing concept that uses abandoned bicycles and existing bike racks to minimize infrastructure cost and make bikes more accessible to students.

Developed by four NC State students, ReCycle won the grand prize in the university’s second annual Make-a-thon, a four-day sustainability innovation competition.

The Feb. 3-5 event brought together 102 students on 35 interdisciplinary teams representing 8 of the university’s colleges. Armed with actual campus and community sustainability data, student teams researched, designed and prototyped sustainability innovations using resources ranging from 3D design and internet of things to geographic information systems and microcontrollers.

“Implementing new technologies ... was definitely a difficult, challenging but fun process. We were able to get out of this comfort zone and learn something that was totally new for us,” said electrical engineering major Jack H-agato, who helped develop ReCycle.

Make-a-thon is organized by NCSU Libraries, University Sustainability Office and four University Housing and Learning Village Engineering Village, Women in Science and Engineering, FoodVillage and AllHeartEntreprenuer Village. With sponsorship from the NC State Sustainability Fund, Autodesk, IBM and several other organizations, students competed for prizes including 3D printers, cash and a consulting session with NC State’s social entrepreneur in residence.

A variation of a hack-a-thon with a sustainability twist, Make-a-thon kicked off with N.C. entrepreneur Eric Heny challenging students to see problems as opportunities for innovation. Then, a day of access to industry experts allowed students to explore the feasibility of their ideas as well as learn new technologies. On the competition’s build day, many teams used the Makerspace inside D.H. Hill Library to turn their ideas into prototypes.

“It’s such an incredibly fulfilling experience to ... go from an idea on paper to it being printed and physical,” said sustainable materials and technology major Nam Pac Alvarez Valleverde, whose team designed a senior system to reduce water waste in agriculture.

On the competition’s final day — about 72 hours after Make-a-thon began — more than 12 judges representing industry and campus partnerships listened to teams’ product pitches and selected winners.

https://sustainability.ncsu.edu/nc-state-make-a-thon-inspires-sustainability-solutions/
Ideas presented at the Make-a-thon finals ranged from wearables designed to reduce food waste to self-powering lights that improve safety of alternative transportation such as biking and skateboarding. Students prototyped energy-saving, motion-sensored streetlights and plumbing that creates energy as water flows through pipes.

Many ideas stemmed from personal experiences. Industrial design major’s student Penghui Jiang twice missed the Wolfline bus to a career fair because the bus was at capacity, so his team designed an app that enables adjustment of bus routes based on real-time demand.

Other teams designed sustainability improvements to residence halls, such as self-charging motion sensors that turn off lights when classrooms are unoccupied and waste chutes that sort trash and recycling.

All ideas included an interdisciplinary perspective due to a competition requirement that teams include members from at least two of the university’s colleges.

"I joined [Make-a-thon] because it gave me a chance to work with engineers. In a real-world setting, I will have to work with engineers. This helps me a lot," said economics major Mihitha Gaha, whose team designed a waterproof solar cube to provide renewable energy during disasters.

Though Make-a-thon is over, many teams indicated their idea isn’t. Between university funding opportunities such as the Sustainability Fund and the Lulu eGenes, it’s possible some projects could become actual products. But even if these ideas remain just ideas, students said the Make-a-thon experience has provided real-world benefit.

“You may not know a lot coming in [to Make-a-thon], but with the mentorship, the technology and the resources available, you can learn a lot and apply it to future career paths you may have," Valdivia said.

See more Make-a-thon projects in this Storyfy story.

Share this post.
Step into Startup Culture

Do you have a great business idea that you think could change the world? Well, check out our newest book display on startup culture and social entrepreneurship to learn more about turning your business idea into reality!

Our newest display highlights a variety of books that focus on topics such as running your startup, creating a lean startup, social entrepreneurship and much more. Here are some more details for just a few of the great reads included in this display. The full list of books can be accessed here.

- The Innovator’s Method: Bringing the Lean Startup into your Organization by Nathan Furr and Jeff Dyer
  - Furr and Dyer outline how to make innovative ideas become successful startups and businesses in real-life. This book walks you through the process of refining ideas and turning them into marketable solutions or products.
Step Into Startup Culture
http://www.library.yorku.ca/web/bbl/2016/01/07/step-into-startup-culture/

- **Startup Misology: Tech Cocktail's Guide to Building, Growing, and Celebrating Startup Success** by Frank Gruber
  - The founder of Tech.Co provides you with a framework for creating a tech startup, while also giving readers real-world examples of failures and successes from well-known startups like WordPress and Basecamp.

- **The Real Problem Solvers: Social Entrepreneurs in America** edited by Ruth A. Shaprio
  - Learn about various aspects of social entrepreneurship from this edited book, such as different types of social entrepreneur ventures, how these ventures are funded, and how social entrepreneurship straddles both the non-profit and for-profit worlds.

- **The Art of the Start 2.0: The Time-tested, Battle-hardened Guide for Anyone Starting Anything** by Guy Kawasaki
  - Arianna Huffington classified this book as the “ultimate entrepreneurship handbook”, as it provides clear, actionable advice for a variety of topics, such as idea generation, financing, and getting the word out about your new product or service.

After perusing our display, you can flex your new startup and social entrepreneurship skills by signing up for the third annual Steacie Library Hackfest! The Hackfest will be held on February 17 and 18 at the Steacie Library. York students from all disciplines are welcome to participate. Students will pitch their startup or social entrepreneurship ideas on the morning of the 17th, then they will form teams, and create a minimum viable product to showcase during the the final presentations on the afternoon of February 18. The Hackfest’s theme this year is Making a Difference with Data, so if you have any great ideas for this topic, please make sure to sign-up for the Hackfest as soon as possible.

Enjoy our new book display and we hope to see you at the Hackfest this year!

Recent Acquisitions, December 21 – December 28, 2015
Recent Acquisitions, January 4 – January 11, 2016
Steacie Library Dungeon Hackfest 2017
By York University Libraries

Date: February 22nd – 23rd 2017
Time: 9:00am Feb 22nd – 5:00pm Feb 23rd
Location: Steacie Science and Engineering Library.

Do you love crunching data? Creating breathtaking visualization? Or do want to learn how to do those things? Do you have a brilliant business involving data idea but you are not sure how to build it? Do you think that there’s some wisdom hidden in someone else’s data that can help us understand the world better? Are you a go-getter who will hack your way to your goals?

If you answered “Yes” to any of these questions, we invite you to participate in the Third Steacie Library Hackfest!

What is a Hackfest? If you haven’t been to one, it is about spending two days collaborating with your fellow students on a particular project, and bringing the project to reality! Students from disciplines such as Computer Science and Engineering, Fine Arts, Business, Digital Media, and Health will work together to share ideas and create solutions.

If you want to gain experience bringing an idea to life, or just want to participate in a fun collaborative environment, mark your calendar for the Annual Steacie Library Hackfest supported by LaunchYU, on February 22nd-23rd, 2017. We look forward to seeing you there!

Breakfast, lunch, and caffeine provided!
Job Descriptions
### Maker Hub Manager

**Position Number:** 076140  
**Effective Date:** 1/30/2017

#### A. General Information

| Name of Incumbent (if any): |  
| Current Job Title: | Maker Hub Manager  
| Business Title: |  
| Current Job Profile (if any): | Program Analyst I  
| Manager Name: |  
| Manager Title: | Head, Gelardin New Media Center  
| Manager Contact Info: |  
| Supervisory Organization Name and Number: | Gelardin New Media Center #0119  
| Type of Position: | Ongoing (Regular)  
| Term Position: | No  
| Term End Date: |  
| FTE: | 75%  
| Emergency Position: | No

#### B. Job Description

**Job Overview**

The Georgetown University Library’s Maker Hub Initiative provides a creative gathering place connecting Georgetown researchers, makers, and entrepreneurs from across campus with specialized equipment and a collaborative atmosphere to design, solve problems, and innovate. The Maker Hub Manager will help chart the direction of the Maker Hub Initiative and oversee daily operations by coordinating instructional activities, supervising a team of student peer mentors, and maintaining safe, organized work areas with fully functional equipment.

This position provides support to individual students or interdisciplinary teams working on independent projects or course assignments that enhance classroom-learning experiences and contribute towards educating the whole person. The manager inspires discovery and experimentation, connecting Georgetown’s art, technology, and business communities with new models of innovation in a low-stakes environment where they can work together to solve problems and learn from each other. A critical aspect of this position involves collaboration with makers from all areas of the University, including academic units, student groups, and individual faculty, students, and staff.

The Maker Hub Manager will be expected to have or develop expertise with all of the equipment offered, including 3D printers and scanners, a laser cutter, sewing machine, vinyl cutter, and electronics, in addition to a wide variety of tools for fabrication.

**Work Interactions**

Reporting to the Director of the Gelardin New Media Center, the Maker Hub Manager will work closely with New Media Center staff to expand and enhance our current focus on digital media to physical making tools and resources.

**Requirements and Qualifications**

**Bachelor’s Degree**

**Practical Experience:**
- 5 years experience working in a Maker Space or organization that connects art, technology, and business communities.
- 2 years experience teaching.

**Technical Qualifications or Specialized Certification:**
- A background in the visual arts or the maker movement and the ability to use a variety of tools, including 3D printers and scanners, sewing machines, and laser cutters.
- Demonstrated experience using digital media and graphic design software.
- Experience with electronics and programming microcontrollers, including Raspberry Pi and Arduino.
### Responsibilities

This section allows you to describe the specific duties performed by the employee in this position. This section should provide detailed tasks tied directly to the summarized duties found in the Job Description above. Effectively used, each section will serve as a space to enumerate the duties grouped within functional categories. List the responsibilities in descending order of importance and indicate percentage of time required to complete the tasks. Percentages must total 100%. You must indicate whether a responsibility is Essential (E) or Non-Essential (NE) in order to comply with the Americans with Disabilities Act.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Maker Hub Management</th>
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<tbody>
<tr>
<td>25%</td>
<td>Develops policies and procedures to ensure a safe, productive environment.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Manages opening and closing the Maker Hub as scheduled to secure library materials and University property.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Maintains organized, tidy work areas; troubleshoots, maintains and resolves equipment, hardware and software problems as needed and refers issues appropriately.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Communicates and enforces policies and procedures; refers patrons to other campus units or outside vendors when necessary.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Monitors and requests any needed supplies and equipment.</td>
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<tr>
<td>E/NE:</td>
<td>Researches and recommends improvements and enhancements to services.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Develops metrics, tracks and assesses activity.</td>
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<thead>
<tr>
<th>Percentage</th>
<th>Instruction and Consultation</th>
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<tbody>
<tr>
<td>25%</td>
<td>Through one-on-one consultations, group workshops and other specialized training, instructs and advises users and staff on the design and production of projects using the tools and equipment available in the Maker Hub.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Creates effective instructional materials to educate patrons and staff on the safe and appropriate use of resources and equipment in the Maker Hub.</td>
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<tr>
<th>Percentage</th>
<th>Student Personnel Management</th>
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<tbody>
<tr>
<td>20%</td>
<td>Recruits qualified students and trains them to safely use all of equipment and tools in order to provide peer-to-peer support and instruction.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Mentors student staff and assigns relevant projects.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Coordinates activities and monitors the overall pace and direction of work.</td>
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<tr>
<td>E/NE:</td>
<td>Schedules staff to monitor the Maker Hub during all open hours; ensures coverage for holidays, finals, snow days and other emergencies.</td>
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<tr>
<td>E/NE:</td>
<td>Evaluates each student every semester to ensure quality work is maintained and ensures correct placement in the appropriate student job tier.</td>
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<tr>
<td>E/NE:</td>
<td>Ensures proper processing of termination paperwork.</td>
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<tr>
<th>Percentage</th>
<th>Community Building</th>
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<tbody>
<tr>
<td>20%</td>
<td>Promotes Maker Hub services and resources through tours, outreach, demonstrations, talks, and displays.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Monitors all forms of online communication with the Maker Hub, including emails, submissions of requests for services (3D printing, etc.) and listservs appropriate to job tasks.</td>
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<tr>
<td>E/NE:</td>
<td>Communicates and coordinates regularly with campus partners in other Maker facilities and units, for instance, Garage Physics @ Reiss, CCT Lab, Carabell Labs, the Napolitano Lab in Walsh, EthicsLab in Healy, the Film and Media Studies program, the GU Computer and Electronics Club, Performing Arts/Costume and Scene Shop Studios, and the McDonough School of Business.</td>
</tr>
<tr>
<td>E/NE:</td>
<td>Develops and maintains the website to highlight resources, services and the community of users.</td>
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<tr>
<th>Percentage</th>
<th>Professional Development</th>
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<tr>
<td>10%</td>
<td>Serves on departmental, library and/or university-wide committees and task forces; as required participates in local consortia and regional and national associations.</td>
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<tr>
<td>E/NE:</td>
<td>Participates in achieving library-wide priorities.</td>
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SPEC Kit 355: Campus-wide Entrepreneurship
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<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>Does this position direct, manage, or oversee a program that serves minors?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Do the job responsibilities include staying overnight with minors in properties owned or operated by GU?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Are the job responsibilities involve regularly spending time alone with minors (individually or in groups)?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Is there another reason for requiring a background check for this position?</td>
<td>No</td>
<td></td>
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Business Researcher Position

The UK Libraries Reference Department has a student position available as a Business researcher. The position is funded by the Kentucky Small Business Development Center and would consist of doing secondary market research for KSBDC counselors to use with their entrepreneurial clients. KSBDC is a non-profit organization that helps entrepreneurs start businesses or change existing ones.

The research usually involves searching in UK’s business databases and other resources for articles and reports that would help the entrepreneurs. The researcher would then write up a short synopsis of what he or she found for the counselor to use with the client. The topics vary widely -- from very high tech -- like nanotechnology companies – to very mundane -- like a bicycle shop or a liquor store. It’s usually pretty interesting and the researcher would get a lot of experience working with business databases -- which is very helpful if you want to work in an academic or corporate library.

The person filling this position does not necessarily need to have a business background – just good researching and writing skills, an ability to work independently, and a willingness to learn. Creativity, flexibility, and persistence would also be good qualities to have. The position is for 20 hours per week and pays $8.80 per hour. Though the pay is low, it is great experience and looks good on a resume. Several people who have had this position in the past are working as Academic Librarians at research universities.
UMass Amherst PTRC / Job Description / March 2017

- Serves as Patent & Trademark Resource Center Representative; attends annual training seminars conducted by the US Patent and Trademark Office; when possible attends webinars conducted by other offices such as the World Intellectual Property Organization (WIPO) and European Patent Office.

- Conducts training seminars on patents and trademarks for; assists with patent and trademark portions of academic class instruction.

- Provides information and reference service to patent and trademark patrons - students, faculty, staff and community patrons.

- Outreach to the community – on campus and beyond – for patent and trademark education.
Entrepreneurship Librarian / Librarian I
Michigan State University
Gast Business Library
2016-2017

JOB DESCRIPTION:

Reporting to the Head of the Gast Business Library, the Entrepreneurship Librarian / Librarian I is a member of the team that plans and delivers the full range of reference, instruction and liaison services to the patrons of the business library.

The specific responsibilities of the Entrepreneurship Librarian/Librarian I include the following:

• Offers a full range of general business reference and instructional services, including weekly on-site reference office hours and e-mail reference services. Provides in-depth, specialized service in the assigned subject areas of entrepreneurship and small business development, supply chain management and corporate social responsibility.

• Maintains effective liaison relationships with faculty active in assigned departments and subject areas (as listed above) and communicates with the same faculty on a regular basis.

• Leads efforts to integrate business library services into a growing number of campus programs and university initiatives in the area of entrepreneurship, including the new campus-wide minor in entrepreneurship.

• Co-teaches and provides embedded instruction to entrepreneurship classes offered through the Broad College of Business. Explores opportunities to teach to entrepreneurship classes in other colleges.

• Develops and markets specialized services to local businesses, economic development agencies and related community groups and presents programs on business library resources and services to these groups.

• Provides oversight and guidance to the library’s makerspace and represents the library in campus-wide initiatives in this area, including 3-D printing and modeling. Supervises one Librarian assigned to the makerspace as a secondary assignment and develops library programs and workshops that highlight the library’s makerspace and related services.

• Strategically selects appropriate business content for the library collection that meets the needs of faculty, staff, students and community members in the assigned areas of responsibility. Communicates the appropriate use of library subscription databases to a wide range of audiences with varying levels of access.

• Provides assistance in using library resources through the development and implementation of orientation and instructional sessions, online research guides and web-based tutorials.

• Participates in relevant library and business professional organizations, and takes an active role in state-wide library initiatives in the area of entrepreneurship.

• Pursues research and publication opportunities or other scholarly activities.

• Other appropriate duties as assigned.
Librarian for NYU School of Professional Studies Graduate Programs
New York University – Division of Libraries in New York City

Description:

The New York University Division of Libraries is seeking a librarian to serve as liaison to the faculty, graduate students, and administrators in the NYU School of Professional Studies. Librarians play a key role in the educational mission of NYU by establishing strong relationships with faculty and students, and connecting them to the services, content, and tools that meet their research, teaching, and learning needs.

The NYU School of Professional Studies offers master's degree programs and graduate certificates in a wide range of professionally oriented areas of study. The School’s graduate programs reflect the emerging trends, opportunities and innovative business strategies in each respective field that they represent, and include programs in the Schack Institute of Real Estate and the Center for Global Affairs. Graduate students at the School of Professional Studies include full-time and part-time students, working professionals, and individuals returning to the academic world after pursuing other pathways. Classes are held in the Washington Square area; the Washworth building, the Midtown Graduate Center, days and evenings, and online. School of Professional Studies graduate programs are served by the NYU Bobst and Brause Libraries.

Responsibilities:

Working in a collaborative environment this tenure-track position is responsible for building a program of extensive instructional, consultation, and research support services; developing responsive and innovative information services; and extensive outreach to faculty and administrators in the School of Professional Studies. The School of Professional Studies Graduate Librarians will create and deliver outreach methods to students (such as consultation hours, social networking forums, and in-library/online services development); develop information literacy and research proficiencies programming; and engage students and faculty as active users of NYU Libraries services and collections.

This position is a member of the business team and reports to the Head of Business and Government Information Services in the Public Services Division of NYU Libraries. The position is engaged in and contributes to the highly collaborative work of the department and the NYU Libraries. The School of Professional Studies Graduate Librarian works with colleagues at the Bobst and Brause Libraries to implement and enhance programs and services, deliver physical and virtual research and reference services, and take a leadership role on projects and initiatives as appropriate.

Qualifications:

Required: ALA accredited MLS and subject Master’s degree required for tenure. Experience in library instruction, reference, and outreach in an academic setting. Candidates should exhibit a strong public service orientation, a high degree of facility with technologies germane to the 21st century library and today’s learners.

Preference will be given to candidates with demonstrated business experience in an academic library environment; or an advanced degree in business, real estate, economics or related discipline.

Professional contributions beyond the primary job, such as publications, leadership in professional organizations, and other research and creative activity, are required for tenure.
Salary/Benefits: Faculty status, attractive benefits package including five weeks annual vacation. Salary commensurate with experience and background.

To Apply: To ensure consideration, send resume and letter of application, including the name, address, and telephone number of three references to: Enrique Yanez, Assistant Dean for Human Resources, New York University Libraries, 70 Washington Square South, New York, NY 10012 or via email to libraries.careers@nyu.edu. Resumes will be considered until the position is filled.

NYU’s Division of Libraries embraces diversity and is committed to attracting qualified candidates who also embrace and value diversity and inclusivity.

EOE/AA/Minorities/Females/Vet/Disabled/Sexual Orientation/Gender Identity
Librarian for Business and Economics

Description:

NYU Libraries seeks a subject specialist in business and economics to support the research and teaching programs of faculty, graduate and undergraduate students in the FAS Department of Economics, the Stern School of Business and other departments and programs across the university. The librarian serves as a library liaison with special emphases on building and curating collections in all formats; developing a program of extensive outreach, instruction, consultation, and research support services; and delivering responsive and innovative information services. The Librarian for Business and Economics supports faculty and student data research needs and makes effective use of statistical methods, system and tools. Librarians play a key role in the educational mission of NYU by establishing strong collaborative relationships with faculty and students and connecting them to the services, content, and tools that meet their research, teaching and learning needs.

The Librarian for Business and Economics is a tenure track position based in the Research Commons, and a member of the Business and Government Information Services group in the Public Services Division, NYU Libraries. The successful candidate works collaboratively with other social science librarians, the Data Services team and colleagues at NYU Abu Dhabi and NYU Shanghai to deliver statistical and numerical services related to business and economics, and takes a leadership role on selected projects and initiatives. Librarians at NYU participate in Library-wide committees and professional activities outside of NYU; and monitor developments and best practices to help ensure the excellence of the NYU collections and research support services.

New York University Libraries: Library facilities at New York University serve the school’s 40,000 students and faculty and contain more than 4 million volumes. New York University is a member of the Association of Research Libraries, the Research Libraries Group, the Digital Library Federation; serves as the administrative headquarters of the Research Library Association of South Manhattan, a consortium that includes three academic institutions; and is affiliated with The New-York Historical Society. For the NYU Libraries Mission and Strategic Plan go to http://library.nyu.edu/about/strategic_plan.pdf

Qualifications:

Required:

- ALA-accredited master’s degree; a second master’s degree will be required for tenure
- Undergraduate or graduate degree in economics or business or related social science discipline
- Public service experience in an academic library, including reference, instruction, or collection development
- Demonstrated public service orientation and knowledge of user needs for teaching, learning, and research
- Demonstrated experience working with statistical datasets and the ability to effectively communicate with faculty, students and staff about textural, numerical and spatial data resources
- Strong interpersonal, written and verbal communication skills
- Demonstrated ability to work independently and collaboratively in a complex organization
- Creative, service-oriented approach to problem solving
- High degree of facility with technologies and systems germane to the 21st century library
- Knowledgeable in the issues surrounding scholarly communications

Preferred:

- Advanced degree in economics
- Experience with quantitative or qualitative packages for statistical analysis, e.g., Stats, SPSS, SAS, Atlas.ti
- Record of professional activities, including research and engagement in professional organizations

Salary/Benefits:

Faculty status, attractive benefits package including five weeks annual vacation. Salary commensurate with experience and background.

New York University Libraries:

Libraries at New York University serve the school’s 40,000 students and faculty and contain more than 5 million volumes. The Libraries supports NYU’s vision to become the first true Global Network University by collaborating and providing services to our 11 global academic centers and our first “portal campus”, in NYU Abu Dhabi. New York University Libraries is a member of the Association of Research Libraries and the OCLC Research Library Partnership. The Libraries participates in a variety of consortia and collaborates closely with the New York Historical Society and the Brooklyn Historical Society. For the NYU Libraries Mission and Strategic Plan go to http://library.nyu.edu/about/Strategic_Plan.pdf.
Title: 3D Design Studio Manager & Renovations Support Specialist

Position Summary
The 3D Design Studio Manager and Renovations Support Specialist provides leadership and coordination for the University Libraries’ 3D Design Studio. The position oversees the daily operations of the Studio, monitors its technology and equipment, operationalizes Studio policies and programs, and supervises student staff. Additional responsibilities include participating in the Libraries’ broader learning environments initiatives, including its Learning Commons, and working collaboratively with the Libraries’ Facilities unit to support new and ongoing library renovation projects.

Required Qualifications
- Strong record of experience working with 3D printing technology, modelling software, and related applications.
- Demonstrable knowledge of 3D printing trends and best practices.
- Minimum two years of supervisory experience.
- Experience with physical space management and facilities development.
- Evidence of creativity and project management skills.
- Experience collaborating across library units and with campus partners.
- Strong interpersonal and communication skills.

Preferred Qualifications
- Knowledge of research library learning environments.
- Background in design, architecture, or engineering.
- Experience with outreach in a university setting.

Duties
65% Manage 3D Design Studio
- Oversees daily operations of the Studio.
- Trains student staff in use of Studio printers and related services.
- Produces and regularly updates student staff training documentation.
- Coordinates student staff schedules.
- Maintains and monitors use of Studio materials and supplies.
- Provides project assistance and user-end troubleshooting
- Monitors Studio compliance of hazardous materials use and other safety standards.
- Ensures that equipment is operational and repairs are made as needed in a timely fashion.
- Communicates Studio-related information (e.g., changes to operating hours, ) to library as needed.
- Collections statistics and other evaluative information about the Studio

15% Support Learning Commons Projects & Programs
WORKS WITH OTHER LEARNING ENVIRONMENTS SERVICE POINT COORDINATORS TO STRATEGIZE EFFECTIVE DELIVERY OF SERVICES WITHIN THE UNIVERSITY LIBRARIES LEARNING SPACES.

CONTRIBUTES PROGRESSIVE, ORIGINAL APPROACHES AND IDEAS FOR THE DEVELOPMENT AND IMPLEMENTATION OF THE NEWMAN LIBRARY LEARNING COMMONS.

COLLABORATES WITHIN THE LEARNING DIVISION, OTHER UNIVERSITY LIBRARIES DEPARTMENTS AND UNITS, AND OTHER CAMPUS PARTNERS ON COMMONS-RELATED INITIATIVES.

15% SUPPORT LIBRARY RENOVATION PROJECTS

- Assists with remodeling and reconstruction projects, working with the University Physical Plant and Renovations Departments.
- Supports Director of Library Facilities and is in contact with Project Managers, contractors, vendors, and Library personnel. Schedules meetings and maintains communication to see renovation projects through to completion.
- Contacts vendors to procure furniture and other items needed for Library renovation projects. Schedules installation of furniture and/or other services from vendors. Works with Learning Division and other Library departments as needed to schedule vendor services.

5% CONTRIBUTE TO THE MISSION OF THE UNIVERSITY LIBRARIES

- Participates in various continuing education and professional development opportunities in order to continually professional practice and philosophies.
- Maintains current awareness in the library profession and related fields.
- Provides quality services in a professional manner with a demonstrated commitment to team efforts, service excellence, and diversity and inclusion.
- Performs other duties as assigned.
Virginia Polytechnic Institute and State University

POSITION DESCRIPTION
Used to establish new positions, fill existing positions, and make role changes

REASON FOR SUBMISSION (check appropriate blocks):
☐ Request to Fill Vacancy  ☐ New Position  ☐ Job Description Update
☐ Role Change*  ☐ Change % Time (e.g. P/T to F/T)

*Requested Role Title: ____________________________  Date Prepared: __________

POSITION IDENTIFICATION INFORMATION

Position Number:
Department Name:
University Libraries
Current or Last Incumbent:
Department Number:
0024100
Role Title:
Project Studio Coordinator & Outreach Librarian
Work Location (for off-campus only):

Work Title:
Fusion Studio Manager and Learning Space Assessment Coordinator
Hours Per Week:
40

Pay Band:
Type of Appointment:
☐ CY Salary  ☐ AY Salary  ☐ Wage

Supervisor's Name:
Renewed Yearly: (for sponsored accounts only)
☐ Yes  ☐ No

Supervisor’s Title:
Associate Director of Learning Environments

Supervisor’s Position Number:
015

Funding (% for each):
Personnel Services use only:

ROLE CODE:  SOC CODE:  FLSA Status:  ☐ Exempt  ☐ Non-Exempt
Job Group  EEO Category  Date Effective:

Level:  ☐ Employee  ☐ Supervisor  ☐ Manager  Approved By:

JOB SUMMARY AND QUALIFICATIONS

Chief Objective of Position:
This position oversees the development and management of the University Libraries’ Fusion Studio. Chief objectives of the position include coordination of the daily operations of the studio as well as the organization of programmatic events related to Studio activities. This position also works to design and implement a commons assessment program using ethnographic and user experience methodologies, with the aim of better understanding the interactions occurring within library spaces and optimizing the Libraries’ learning environment for effective collaboration and learning.

The Fusion Studio Manager and Learning Space Assessment Coordinator contributes to the development of the Learning Environments unit by providing insight into current and emerging library practices in project management, interdisciplinary research practices, and user experience studies. The position applies creative problem-solving skills to meet the needs of the changing academic learning environment and works cooperatively with other units throughout the library system. This position represents the unit with external partners when necessary.
Qualifications:

**Required Qualifications**

- Master’s degree or higher.
- Demonstrated evidence of interdisciplinary collaboration.
- Strong communication and interpersonal skills, including the ability to work collaboratively with individuals and groups.
- Evidence of successful project management and outreach skills.
- Ability to work as part of a team in order to accomplish institutional goals in a fast-paced, energetic environment.

**Preferred Qualifications**

- Experience with strategic planning, program assessment, and project management.
- Experience in core library liaison activities, including reference, instruction, and collection development.
- Familiarity with interdisciplinary research methodologies.
- Evidence of creativity, innovation, and scholarship.
- Experience with space management.
- Experience with ethnographic methodologies.
- Evidence of cross-campus collaboration.
- Grant writing experience.

Education, Licensure, Certification required for entry into position:

Does the employee supervise 2 or more Full Time Equivalent employees: [ ] Yes [ ] No

Which of the following are required to meet legal and policy requirements?

- [ ] Commercial Driver’s License (CDL)
- [ ] Criminal History check
- [ ] Driver’s license
- [ ] Drug screening
- [ ] Medical exam
- [ ] Other, specify:

**PHYSICAL REQUIREMENTS**

Check the physical activities required to perform the essential functions of the position:

- [ ] Light lifting (<20 lbs.)
- [ ] Standing
- [ ] Sitting
- [ ] Bending
- [ ] Moderate lifting (20-50 lbs.)
- [ ] Lifting
- [ ] Walking
- [ ] Climbing
- [ ] Heavy lifting (>50 lbs.)
- [ ] Reaching
- [ ] Repetitive motion
- [ ] Pushing/pulling
- [ ] Other, specify:

**CORE RESPONSIBILITIES**

<table>
<thead>
<tr>
<th>%</th>
<th>Describe major responsibilities in each functional area of responsibility.</th>
</tr>
</thead>
<tbody>
<tr>
<td>% 60</td>
<td>Manages daily operations of the Fusion Studio</td>
</tr>
<tr>
<td>Coordinates facilities management.</td>
<td></td>
</tr>
<tr>
<td>Actively identifies, cultivates, and maintains partnerships with university academic programs, students, faculty and staff to facilitate collaborative projects and promote awareness of Fusion Studio and other library services.</td>
<td></td>
</tr>
<tr>
<td>Arranges scheduling of studio participants and provides project support services.</td>
<td></td>
</tr>
<tr>
<td>Provides technology training and support.</td>
<td></td>
</tr>
<tr>
<td>Organizes programmatic events involving studio participants.</td>
<td></td>
</tr>
<tr>
<td>Regularly assesses and documents campus use of studios.</td>
<td></td>
</tr>
</tbody>
</table>
### Coordinates assessment of University Libraries learning spaces

- Works collaboratively with partners in Learning Division and other library units to design and implement a commons assessment program using ethnographic and user experience methodologies.
- Analyzes and reports quantitative or qualitative data gathered from various sources including library systems, observations, surveys, web analytics, interviews, and focus groups.
- Investigates and communicates new methods for data collection, analysis, and documentation for learning spaces assessment.
- Communicates and publishes findings, datasets, and reports to library in support of decision-making; reports data and findings to external audiences as appropriate.

### Participate as a leader in the Learning Environments Team

- Works collaboratively with Learning Environments service point coordinators to strategize effective delivery of services within the learning spaces of the University Libraries.
- Contributes progressive, original approaches and ideas for the development and implementation of learning environments at University Libraries.
- Collaborates within the Learning division, other University Libraries departments and units, and other campus partners on learning-related activities.
- Conducts research and produces scholarship as appropriate.

### Contribute to the mission of the University Libraries

- Participates in continuing education and professional development opportunities in order to continually professional practice and philosophies.
- Maintains current awareness in the library profession and related fields.
- Serves actively on appropriate Departmental, Library, University, and professional committees.
- Provides quality services in a professional manner with a demonstrated commitment to team efforts, service excellence, and diversity and inclusion.
- Performs other duties as assigned.
Books, Reports, and Journal Articles


