



UNIVERSITY LIBRARIES
VIRGINIA TECH.

2019 - 2020 **Annual
Report**



MAJOR ACCOMPLISHMENTS

ADVANCE REGIONAL, NATIONAL, AND GLOBAL IMPACT

University Libraries actively contributes to the university's learning, discovery, and engagement missions.

The Library **builds and enhances partnerships** through research, data and emerging technology consultations, workshops, course-embedded instruction, and outreach events that result in grant proposals, funding awards, research studies, and scholarly publications.

The Virtual Environments Studio led grant-funded partnerships with Montgomery County Public Schools and the companies AMD and XR Virginia in **educational virtual reality** research, and brought the emerging technology of VR to Virginia K-12 schools and universities globally.

The OCLC, a global library initiative, invited the Library's **strategic research analysis and research impact team to present expertise on research analytics and competitive intelligence**, which led to a blog post by OCLC's research scientist Brian Lavoie, "Making connections: Research analytics at Virginia Tech."

The research impact team contributed to research assessment **university governance and policy discussions**, provided open workshops, consulted with researchers to **optimize their online presence for increased research visibility**, and **provided detailed contextual research impact reports** for individuals and departments.

ELEVATE UT PROSIM (THAT I MAY SERVE) DIFFERENCE

The University Libraries commits to build and maintain enduring climates of mutual care, respect, and responsibility. We support inclusion, diversity, and equity on campus and in our communities.

The Virginia Tech School of Medicine Library is a founding partner with the Feed, Read & Grow program to improve the health of Roanoke City under-represented minorities and under-served families. Outcomes include new and strengthened community partnerships, educational programs and social services at the City of Roanoke Public Libraries main branch.

The University Libraries Course Exhibit Initiative's **The Land Speaks digital exhibit**, which shares the story of the Monacan Indian Nation's ongoing fight to preserve their ancestral capital from modern development, **is indicative both of the University Libraries' commitment to diversity, inclusion, and collaboration**. It represented joint work between the University Libraries, the Departments of History and Political Science, Virginia Tech American Indian & Indigenous Community Center, and Monacan Nation.

The University Libraries' Applied Research in Immersive Environments and Simulations is built entirely of students, save for the Executive Director, and collaborations with faculty and external partners. **ARIES engages** in projects that **tell the stories of marginalized people (VT 150), approaching new students with a culturally-relevant lens (Reimagining DiVersiTy)** and through the practice of **hiring students from a diverse set of disciplines and skill levels**. During the academic year 2019-2020, the ARIES program **employed 16 students, and collaborated with 46 Virginia Tech faculty plus 5 external collaborators**.

University Libraries continued development of the [Collection on Higher Education Policy for Minorities in the United States](#) of more than 1,400 policies, white papers, technical reports, and other assorted gray literature from dozens of international, national, and regional organizations and agencies. The materials particularly focus on higher education access, educational financing,

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admissions, retention, and socioeconomic barriers to historically marginalized communities.

Ana Corral, Virginia Tech resident of the Association of College Research Libraries' Diversity Alliance for Academic Librarianship residency program, created [The Comunidad Book Club](#), a partnership between the University Libraries, the Blacksburg Public Library, El Centro, and LASO to **foster belonging and encourage the region's Spanish speaking population to form and maintain connections.**

BE A DESTINATION FOR TALENT

We transform the way people experience knowledge and help to attract bold and dynamic faculty, staff, and students.

In partnership with the Office of Undergraduate Research, the Library provided a new winter version of the **Advanced Research Skills program** with Human Nutrition, Foods and Exercise and four summer programs including a new online 10-week summer training program with 291 students from multiple institutions around the globe.

The Art + Architecture Library created the **A+D Tools Portal as an experiential learning project** with graduate assistants in the School of Architecture + Design. The A+D Tools Portal provides a gateway for students to explore the digital tools and maker items in the Art & Architecture Library, Burchard Hall, Cowgill Hall, Newman Library, Research and Design Facility, and Torgersen Hall.

The University Libraries created a unique **Digital Wellness Curriculum** with five core workshops; Build Your Online Presence with ePortfolios, Fact-Checking, Digital Self-Care, Declutter Your Digital Stuff, and Good Passwords. Library faculty customized these core workshops for 767 students representing groups across campus including the Graduate School, Hokie Wellness, Pamplin International, Global Education Office, CLAHS, CALS, CNRE, Living Learning Communities, and College of Engineering. Since 2017, student participation has grown 97%.

The Library's research impact team is a **leader in analyzing and elevating research.** It was invited to present on ORCID and researcher identifier workflows to librarians at the College of William & Mary. The team was also invited by Elsevier to speak to more than 400 librarians and researchers on researcher profiles and impact metrics during its Library Connect webinar.

ENSURE INSTITUTIONAL EXCELLENCE

The University Libraries is shifting from a knowledge service provider to a collaborative partner by optimizing and promoting library programs, services, and technologies.

The 3D Design Studio provided 3D printing, 3D scanning, and reverse engineering expertise to provide hundreds of 3D printed PPE parts to the region after the outbreak of COVID-19. The studio **contributed nearly 40% of the printed PPE that the Virginia Tech COVID-19 Response Team sterilized, packaged, and shipped to local hospitals and first responder agencies.** We were also able to contribute to the **creation of extra aerosol testing apparatus** for the Charles P. Lunsford Professor of Civil and Environmental Engineering Lindsay Marr.

With support from the Data & Decisions DA, the Library added 14 certified carpentries instructors. This significantly expands the Library's educational offerings that build foundational computational skills for graduate students and early career faculty. The instructors ran three complete

carpentries workshops in basic command line skills, version control, programming with Python, each with an additional instruction day in foundations of data analysis with R. We're adding sessions to meet the increased campus-wide demand for this instruction.

The Athenaeum suite of spaces hosted 19 College of Liberal Arts and Human Sciences courses serving 400 students, a total of 31 workshops, seminars, and speaker events attended by 636 people, and supported many other programs attended by nearly 2,000 more.

Virginia Tech Publishing (VTP) is a leader in **publishing notable textbooks and student book publications**. In addition to publishing one open textbook under the VTP imprint ([Electromagnetics, vol. 2](#)), VTP supported publication of over a dozen other Open Educational Resources. We also published three books of student essays as history and sociology class projects.

University Libraries collaborated with Professor Ed Fox and Digital Library Research Laboratory to **provide stable, ongoing support for grant-funded research projects, data, and tools**, including NSF-funded Global Event and Trend Archive Research (GETAR) and the digitization and 3D modeling of Virginia Tech's Insect Collection with the School of Visual Arts and the Department of Entomology.

The Library's collections team is continually **improving its processes to provide scholarly information resources for Virginia Tech**. This is a collaborative effort between central collection management and library subject liaisons using user feedback, data analysis, and database trials.

NEW UNIVERSITY LIBRARIES PROGRAMS THAT WORKED WELL DURING THE PAST ACADEMIC YEAR

THE UNIVERSITY LIBRARIES HAS CREATED AND LEVERAGED SUCCESSFUL PROGRAMS AND STRATEGIES TO ENHANCE VIRGINIA TECH'S MISSION AND SOCIETAL IMPACT.

The new University Libraries' assistant director, strategic research and industry intelligence analyst **provides data-driven analysis for LINK + LICENSE + LAUNCH's complex and multifaceted work**. In her new role, [Connie Stovall](#) uses her full range of library information science expertise, from soft skills to technical competencies, to arm the LINK + LICENSE + LAUNCH team with data, models, market realities, technical insight, and more.

In collaboration with the Fralin Biomedical Research Institute, the University Libraries developed a shared vision and programmatic options for a **library in the institute's building**. A studio manager has been hired for the space and the grand opening is scheduled for spring 2021.

The Library's **successful application to join the Data Curation Network (DCN)** will allow us access to a network of specialized data curators who can help ensure that the research data produced at Virginia Tech is curated, shared, and preserved according to the highest standards and for the common good. The DCN is an exclusive network of 11 data repositories that share curation responsibilities and workflows for specialized content submitted to their repositories.

The 3D Design Studio **launched 3D digitization services with a partnership led by University Libraries' Max Ofsa and Geosciences Professor Sterling Nesbitt** to digitize, 3D print, and [replicate prehistoric dinosaur bones](#).

The foundational instruction program focused on **increasing the impact of digital literacy programs** by increasing educational programming for first year students and delivering instruction **aimed at developing students' foundational, intermediate, and advanced digital literacy competencies**. The University Libraries' **digital literacy framework and toolkit is used by other universities** including Juniata College, Belmont University, and [Johns Hopkins](#) University and featured in [University Business](#) Magazine.

The University Libraries built the groundwork to offer a **new kind of metadata consulting service to Virginia Tech**. We also created a more efficient alignment of work across library units, and a relatively seamless introduction of new workflows that enhance access to all the Library's digital collections. For example, late in the spring semester we embarked on a short-term partnership with the Policy Destination Area to build a prototype database of policy-themed COVID datasets. Our student research experience program, DataBridge, worked with our metadata services team and the Policy DA stakeholders to rapidly build the prototype database using google scripts and google's hosting infrastructure. **This project represents an achievement in rapidly responding to a researcher's needs within a public health emergency.**

University Libraries data services **created new consulting services in machine learning**. For example, we created a tool that finds a common language in a data set of 6,500 published whiskey reviews of about 50 to 100 words each. This project, funded by a SEAD Major Grant from [The Institute for Creativity, Arts, and Technology \(ICAT\)](#), was spearheaded by [Department of Food Science and Technology](#) researchers Jacob Lahne and Leah Hamilton and [University Libraries'](#) data consultants Chreston Miller, and Michael Stamper. **According to the project team, there have been no previous attempts to apply this sort of approach for sensory-evaluation purposes.**

Virginia Tech Publishing successfully **released its first series of short-form scholarly works—[The Proxy Wars Project Conflict Studies](#)**. Proxy Wars Project Conflict Studies is jointly directed by [Ariel Ahram](#) (SPIA) and [Ranj Alaaldin](#) (Brookings Doha Center) and funded by the [Carnegie Corporation of New York](#). To date, the series has released four papers covering Iraq, Libya, Syria, and Yemen.

During this year, the University Libraries **formed the division of archives and technology services** to encompass digital libraries, information technology service operations, special collections and university archives, digital imaging and preservation, a brand-new policy and governance unit, and financial services.

Private support for University Libraries has increased over the last fiscal year. Successful advancement efforts led to new gifts and commitments equalling \$1,737,638 in FY20, an increase of \$1,389,699 over FY19.

The Library's archives and technology services team began including a **5% inclusion and diversity role in all director-level job descriptions**. This pilot initiative includes actively supporting University Libraries in its efforts to provide an inclusive and diverse work environment. Library leadership is in discussion to include this role in all director-level position descriptions across the University Libraries.