2023-2024
Annual Report

VT | UNIVERSITY LIBRARIES
VIRGINIA TECH

MESSAGE FROM THE DEAN

University Libraries at Virginia Tech is a key partner in research and innovation, elevating the university's global reputation and impact. As a leader among academic libraries at prestigious research universities, our faculty assist researchers through workshops, training, and resources in areas such as evidence synthesis, research impact, data management, open publishing, and emerging technologies like artificial intelligence and augmented reality. Virginia Tech librarians are committed to making information accessible through digitization and open repositories.

The 2023-2024 annual report showcases stories that exemplify our 2020-2025 strategic plan goals, which align with Virginia Tech's broader strategic vision. This report highlights the expert work of faculty and staff across our library system, from increasing the reach of faculty scholarship and making educational materials more affordable to collaborating on impactful research addressing global challenges.

We regularly host groups from other academic libraries to share our expertise in library science and service to an R1 university. We also provide workshops and presentations at regional, national, and international conferences. I invite you to learn more about the work and achievements of University Libraries at Virginia Tech.

Tyler Walters, Ph.D.
Dean, University Libraries
Virginia Tech

2023-2024
BY THE NUMBERS

CORE METRICS

Library Resources

Strategic plan initiative: Ensure Institutional Effectiveness
Percentage represents change from FY23

Digital Collections Use
19.88M
7.39%

Subscription Electronic Collections Use
20.94M
13.32%

Website Use (includes homepage and LibGuides)
2.67M
48.73%

Physical Collections Use
44,546
29%

SUBSCRIPTION USE

12,880,442 16.10% — Databases
6,805,082 6.71% — Journals
958,072 12.85% — eBooks
297,246 87.06% — Multimedia

CORE METRICS

Learning outcomes

Strategic plan initiative: Advance Regional, National, Global Impact
Percentage represents change from FY23

Total Instruction Events
1,981
26.50%

Total Instruction Event Participants
24,565
19.98%

Instruction Events that support university curricula
1,546
34.79%

Attendees of events supporting university curricula
10,662
25.84%

Technology lending through studios

Technology lending in FY24	Technology lending in FY23
12,546 loans	**9,591** loans
3,326 unique users	**2,813** unique users
560,228 hours booked	**299,969** hours booked

Building Use
1.32M
6.43%

Reference
6,550
-14%

Consultations
2,289
8.8%

CORE METRICS
Intellectual Output
Strategic plan initiative: Advance Regional, National, and Global Impact

CORE METRICS
Climate Outcomes
Strategic plan initiative: Elevate the Ut Prosim (That I May Serve) Difference

GRANTS AWARDED
17
54.55%

NEW GRANTS AWARDED
3

AMOUNT OF GRANT DOLLARS AWARDED
$515,466
-0.70%

OVERALL PATRON POSITIVE SATISFACTION:
88.89%
-2.64%

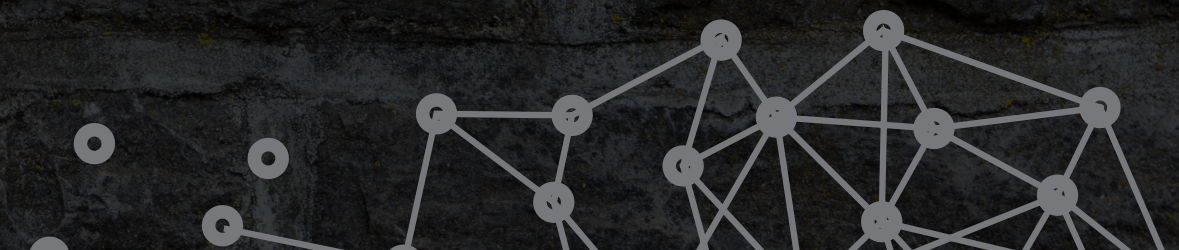### ONLINE CHAT POSITIVE SATISFACTION:
96.70%
-1.19%

STUDIO POSITIVE SATISFACTION:
87.40%
-0.30%

GOAL

ADVANCE REGIONAL, NATIONAL, AND GLOBAL IMPACT

University Libraries, through its activities involving creativity and innovation, data, and scholarship will actively contribute to the university's learning, discovery, and engagement missions and advance its regional, national, and global impact.

University Libraries **elevates the productivity and impact of faculty scholarship** through openly sharing research data and scholarly articles and promoting faculty-authored books and expertise. This work **enhances the university's global reach and reputation**.

Open textbook project wins prestigious international prize

When Anita Walz sat in the audience at the 2023 Association of Learned and Professional Society Publishers (ALPSP) Annual Conference Awards ceremony in Manchester, England, she was surprised to hear that a new award was specifically created to honor her team's open textbook project "Original Études for the Developing Conductor." A nomination had been submitted for the ALPSP Impact Award 2023 and the team won a newly created "highly commended" designation in the Impact Award category.

"While I accurately predicted the winner for the original Impact Award, the fact that they created a separate award for us was completely unexpected," said Walz, University Libraries' assistant director of open education and scholarly communication librarian.

"I wasn't able to attend the conference, but shocked and honored would sum up my emotions pretty well," said Jonathan Caldwell, assistant professor of conducting and director of bands at the University of North Carolina Greensboro and co-editor of the textbook. "It was an honor to be recognized and know the committee sees the value and innovation in the book."

Far more than a trophy for bookshelves, the prestigious ALPSP Impact Award honors initiatives, projects, campaigns, or collaborations within scholarly publishing and academic research that are making a positive difference and resonate deeply through society. The impact can be on any area that can make a significant difference to people such as the community, education, the environment, or advancing diversity and inclusion.

Winning the award attested to the value, impact, and foresight of the team's work. Award chair David Sommer wrote, "We awarded highly commended to 'Original Études for the Developing Conductor' in recognition of the notable impact this educational resource is having in terms of improving quality, accessibility and diversity." This international award had multiple levels of scrutiny and the judges reviewed written applications, video presentations, blog posts, a live presentation, and Q&A session.

Virginia Tech team accepted into 2024-2025 AACU Institute on Open Educational Resources

A team of Virginia Tech open educational resources (OER) advocates was accepted into the American Association of Colleges and Universities (AAC&U) 2024-2025 Institute on Open Educational Resources. This year-long online institute aims to help campus and state system teams increase OER engagement and adoption.

The Virginia Tech team includes:
Anita Walz (University Libraries)
Eric Kaufman (Ag Leadership and Community Education)
Lizette Zietsman (Math/CMDA)
Derek Mueller (English)
Nicole Pitterson (Engineering Education)

University Libraries' Open Education Initiative leads OER work at Virginia Tech. Since 2014, it has published over 30 original and remixed open educational resources in formats including textbooks, virtual reality, video, test banks, and slides. These publications have saved Virginia Tech students over $3.3 million and are adopted by hundreds of other institutions. The initiative, a one-person team with one vacancy, is currently supported by Virginia Tech Publishing within University Libraries.

OER by the numbers in FY24:

64
course adoptions of OER
(73% increase in FY24)

$929,470
in student savings
(66% increase in FY24)

12,251
students used OER in class
(45% increase in FY24)

Corinne Guimont, associate director of publishing and digital scholarship

New leadership guides Virginia Tech Publishing toward future

Corinne Guimont, associate director of publishing and digital scholarship, will lead Virginia Tech Publishing, the university's digital-first open access publisher, in its mission to share Virginia Tech scholarship openly and broadly. She is excited to build upon the foundational work of Peter Potter who began Virginia Tech Publishing in 2017.

Recently, Virginia Tech Publishing expanded its team to meet the growing demand for book and digital scholarship publishing by Virginia Tech authors. This directly contributes to university efforts to increase global dissemination and impact of Virginia Tech research and scholarship.

Since arriving at Virginia Tech seven years ago, Guimont has served Virginia Tech Publishing in open educational resources, digital humanities, digital scholarship, and digital publishing to craft the solid building blocks to support and publish more complex digital projects.

Virginia Tech Publishing is known for its commitment to increasing the visibility, reach, and impact of research produced at the university. Everything it publishes is open access, which means it's freely available online or a print edition is available at cost through a third-party vendor.
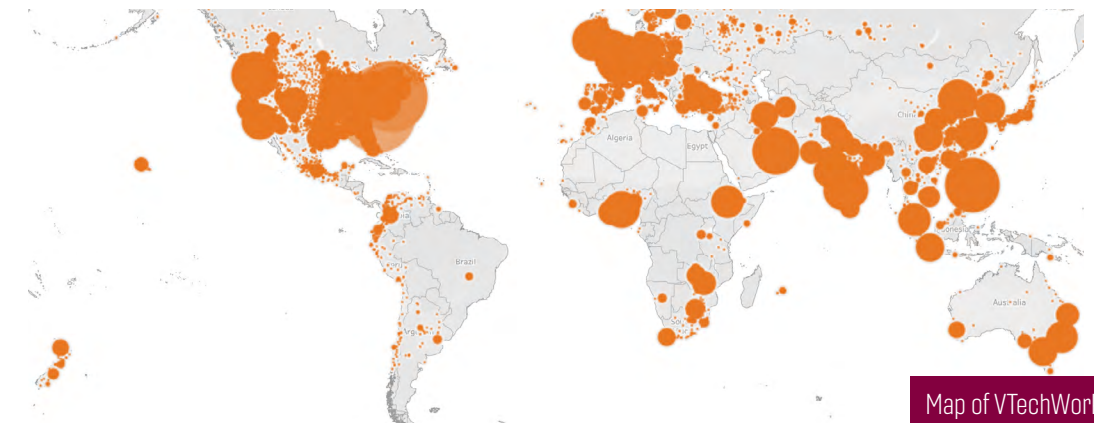
"Being embedded in the library allows us to provide both publication opportunities for the Virginia Tech community and consulting on external publishing opportunities," said Guimont. "Our goals are to help authors better learn and understand the publishing process and to share scholarship as broadly as possible. We work closely with authors throughout the writing and editing processes to create high-quality peer-reviewed open access publications."

In addition to faculty projects, Virginia Tech Publishing offers students a taste of what it's like to be a published author.

"A large part of our work has focused on student publications and creating space on campus for undergraduate and graduate students to publish their work before leaving the university," said Guimont. "We currently support four open access student journals and have published seven, soon to be nine, student book projects. This is in addition to our portfolio of openly published faculty-authored books, journals, digital humanities projects, open textbooks, and media projects."

Guimont is looking forward to continuing and expanding this work.

"Publishing is an important and impactful way to share scholarship with the world," said Guimont. "Virginia Tech Publishing serves Virginia Tech's mission to make education accessible and affordable while solving global challenges through research and outreach."

Virginia Tech's scholarly repository VTechWorks marks 100,000th item

Virginia Tech's scholarly repository VTechWorks marked a milestone of its 100,000th deposited item. During FY24, the university community deposited 5,252 items into the repository. This is a 24 percent increase from FY23.

VTechWorks provides global access to Virginia Tech scholarship, including journal articles, books, theses, dissertations, conference papers, slide presentations, technical reports, working papers, administrative documents, videos, images, and more by faculty, students, and staff. Faculty can easily deposit items including journal articles covered by the University open access policy.

VTechWorks is an open repository, which means that anyone around the world with an internet connection can access and download journal articles, presentations, theses, dissertations, and other documents hosted on the site. Openly available research is cited 18 percent more, on average, than research only available behind publisher paywalls. Open access facilitates the advancement of knowledge and makes a greater impact on society, including economic benefits.

VTechWorks transitioned from DSpace 6 to DSpace 7 during the fiscal year 2024. It has improved the interface's appearance and now features more information about the Open Access Policy, electronic theses and dissertations, and open textbooks on the homepage.

Virginia Tech Repository is invaluable for advancing discovery

FY24:

Published 64 datasets

14,500 dataset downloads from users across the globe

The Virginia Tech Data Repository highlights, preserves, and provides open access to Virginia Tech research data.

In 2023, the Virginia Tech Data Repository began tracking the number of citations for each published dataset in the repository. Based on the current citation information available through the repository's search interface, the most used datasets are drone imagery related to the structural integrity of U.S. bridges deposited by a former civil engineering graduate student.

The machine learning research community has adopted these datasets, since members seek high-quality imagery datasets for training new models and algorithms. The University Libraries' data services team looks forward to learning more about and tracking how datasets are used. The team will gain clarity on which datasets in the repository are well-used for secondary research through tracking citations.

Virginia Tech Digital Library Featured Collections

Digital libraries team launched the Virginia Tech Digital Library

The Virginia Tech Digital Library combines all collections into a single, federated search system enhanced with innovative technologies, unique collections, and human-centered accessibility.

Designs for a homegrown digital library, rather than using a vendor or out-of-the-box software, started in 2018. The team created the first iteration in 2019 to support the grant-funded International Women in Architecture (IAWA) collection. In 2022, the team launched the Southwest Virginia Community Collections (SWVA), a separate iteration of the same platform. "Once we had a full team of developers," said Alex Kinnaman, interim assistant director of digital libraries and preservation, "they began work on a single federated site in 2023 and launched the Virginia Tech Digital Library (digital.lib.vt.edu) in January 2024.

According to Kinnaman, the new site is more advanced than previous iterations. All of the collections are searchable from one interface rather than being separated on different sites, increasing the discoverability and accessibility of all collections. This library shows the full breadth and depth of the unique collections at Virginia Tech.

The Virginia Tech Digital Library's collections represent significant areas of Virginia Tech and Virginia's history and culture. For example, the Tin Horn collection highlights the first women's yearbook at Virginia Tech and collections like Barter Theatre, Salem Fire Department, and many others are examples of previously unseen cultural heritage and community collections in Virginia.

"Our collections are not limited to what the library or university owns," said Kinnaman. "They include collections from cultural heritage communities and organizations, uniquely designed Virginia Tech projects, and grant-funded work."

The Virginia Tech Digital Library includes 2D items like photographs and documents and 3D models on the same page as their 2D counterparts for users to seamlessly switch between the two. This is made possible by different viewers integrated into the digital library interface. The library also has a specialized viewer for exploring cutting-edge STEM projects.

"The technical infrastructure of the Virginia Tech Digital Library is built on Amazon Web Services (AWS) and composed of AWS integrations and homegrown services," said Jennifer Goyne, digital libraries project manager. "It also serves as the preservation system for the Digital Library, VTechWorks, and later this year, for digitized Special Collections and University Archives material. We are planning infrastructure developments for the next year, such as single-sign-on, additional preservation measures, and more AI integrations to enhance user experience."

"Our Digital Library and the planned developments will set us well above the typical university digital library based on its diversity in collections, types, and technology integrations that will serve as a model for other universities," said Kinnaman.

GOAL

ELEVATE THE UT PROSIM (THAT I MAY SERVE) DIFFERENCE

University Libraries commits to build and maintain enduring climates of mutual care, respect, and responsibility. We affirm the intrinsic humanity of every person and claim an active role in removing all barriers to inclusive and equitable participation in our work.

University Libraries **engages in partnerships** to provide service to students, faculty, and local communities and **encourages an environment in which all individuals can thrive**.

Fralin Biomedical Research Institute

Students studying during finals week at Newman Library

Comunidad Book Club expands its reach in Roanoke

The Comunidad Book Club is a Spanish-speaking group, including both native speakers and second language learners, that meets monthly to discuss literature written in Spanish. The club began as a collaboration among University Libraries at Virginia Tech, REFORMA (The National Association to Promote Library and Information Services to Latinos and the Spanish Speaking), El Centro (Hispanic and Latinx Cultural Center at Virginia Tech), and the Latino Association of Student Organizations at Virginia Tech.

Roberto Silva, University Libraries' head of the Fralin Biomedical Research Institute Health Sciences and Technology Library

"Having successfully led the Comunidad Book Club since 2021, we decided to extend the book club concept to Casa Latina, a nonprofit organization in Roanoke dedicated to addressing the needs of the local Spanish-speaking community in the Roanoke Valley, utilizing several titles and copies of books we had previously used," said Roberto Silva, University Libraries' head of

the Fralin Biomedical Research Institute Health Sciences and Technology Library. "In June 2023, we launched the first Spanish-language book club in the city of Roanoke, sponsored by both an academic institution and a nonprofit organization. The success of this initiative is evidenced by the creation of a second book club just three months later."

The club's purpose is to provide a structured and welcoming environment where members can freely express themselves, sharing their thoughts, interpretations, and opinions about selected books while building a strong sense of community through the shared habit of reading.

"I have taken a long-term, deliberate approach to developing our relationship with Casa Latina, a partnership that has evolved over the past three years and has fostered significant growth within our community group," said Silva. "The aim has always been to create mutual benefits through shared interests, and the book club has become an ideal platform for bringing us together."

"By making Virginia Tech resources accessible to the public and opening the doors of our health sciences library, we not only support the Spanish-speaking community of Roanoke but also enrich our academic environment by fostering cultural competency among Virginia Tech professionals," said Silva. "Personally, I have always been passionate about giving back to the community, and I'm grateful for the opportunity to contribute in this meaningful way."

University Libaries receives 2024 Insight Into Diversity magazine's Library Excellence in Access and Diversity Award

University Libraries at Virginia Tech received the 2024 Library Excellence in Access and Diversity (LEAD) Award from Insight Into Diversity magazine for its programs and initiatives that encourage and support diversity and inclusion.

Among the 56 academic library award recipients from across the nation, University Libraries at Virginia Tech is the only Virginia awardee.

"We are honored to be chosen for this award," said Tyler Walters, dean of the University Libraries. "We strive to actively encourage partnerships and provide programming that is inclusive and accessible to all. This exemplifies our commitment to the university's motto Ut Prosim (That I May Serve) in the spirit of diversity and community."

A few initiatives highlighted in the nominating materials included the library's commitment to supporting underrepresented authors and researchers through open access publishing and celebrating authorship at the

annual Virginia Tech Authors Recognition Event. The materials also featured the creation of Virginia's only U.S. Patent and Trademark Resource Center in Newman Library to support inventors and entrepreneurs in the region and the library's work in finding and creating research connections with historically Black colleges and universities.

University Libraries will be featured as a LEAD award recipient in the magazine's March issue. Insight Into Diversity is the largest and oldest diversity and inclusion publication in higher education.

"We know that many academic libraries are not always recognized for their dedication to diversity, inclusion, and access," said Lenore Pearlstein, the magazine's owner and publisher. "We are proud to honor these college and university libraries as role models for other institutions of higher education."
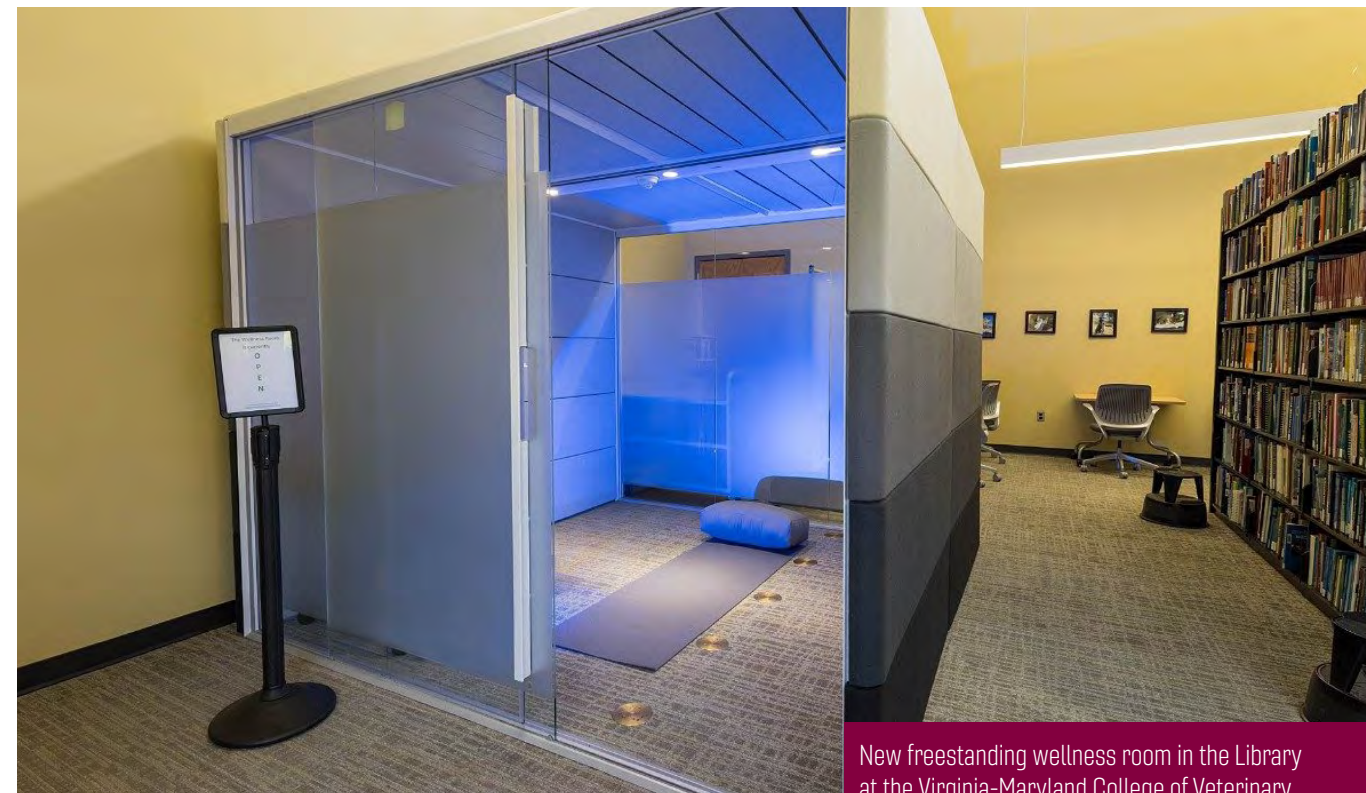
Tyler Walters, University Libraries Dean

New freestanding wellness room in the Library at the Virginia-Maryland College of Veterinary Medicine. Photo by Andrew Mann for Virginia Tech.

Dean Tyler Walters served as keynote speaker for 2024 VIVA Community Forum

As a result of University Libraries' reputation for diversity and belonging initiatives, Dean Tyler Walters delivered the keynote address at the virtual 2024 VIVA Community Forum in April. VIVA, Virginia's academic library consortium, represents 71 non-profit higher education institutions.

The forum's theme, "Beyond Land Statements and Recognition Months," examined Virginia libraries' actions to foster inclusivity and amplify marginalized voices. Walters highlighted Virginia Tech's Principles of Community as the foundation of the library's commitment to inclusion and diversity. He emphasized that this commitment begins with an inclusive culture respecting all backgrounds and their contributions.

Walters discussed initiatives such as restorative justice circles for community-centered conflict resolution, engagement with university cultural and community centers' projects, support for student health and well-being beyond academics, and collaborations with external partners to address societal challenges.

Veterinary Medicine Library hosts wellness room to support mental well-being

Under the leadership of Kyrille DeBose, associate professor and director of Health Sciences Libraries, the college's veterinary medicine library, a branch of the University Libraries, recognized the evolving demands on students and faculty.

"The wellness room is an innovative addition designed to cater to individual's mental health and wellness needs, offering a quiet and reflective area for students, staff, and faculty alike," DeBose said.

The project began with the college's academic affairs department acknowledging the importance of addressing spiritual, mental, and emotional health. What started as a quest for spaces dedicated to prayer expanded to include meditation and overall wellness.

Students, as well as staff, also needed spaces to accommodate virtual health care and wellness appointments, DeBose said. "We recognized that many students and staff, residents and interns lack personal office spaces. We don't want them trying to have an appointment for telehealth with a laptop or phone balanced on the steering wheel of their car. Having a designated space close by would be much better."

DeBose wants the library to be a space that reflects the evolving needs of the college community. To do that, an area that stored rarely used books — about 1,100 titles that hadn't been checked out since 2005 — on dusty shelves was repurposed as the wellness room. The room features frosted glass panels for privacy, natural light, and amenities such as resistance bands for light exercise and yoga. Its location within the library also facilitates easy reservations.

University Libraries team digitizes reels of agricultural history to preserve and provide access
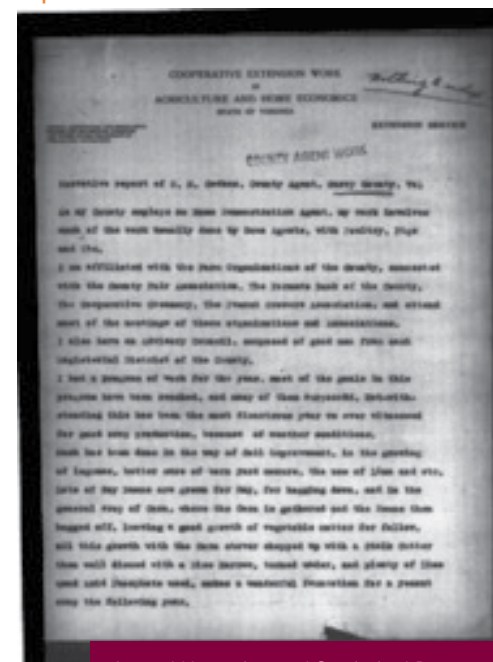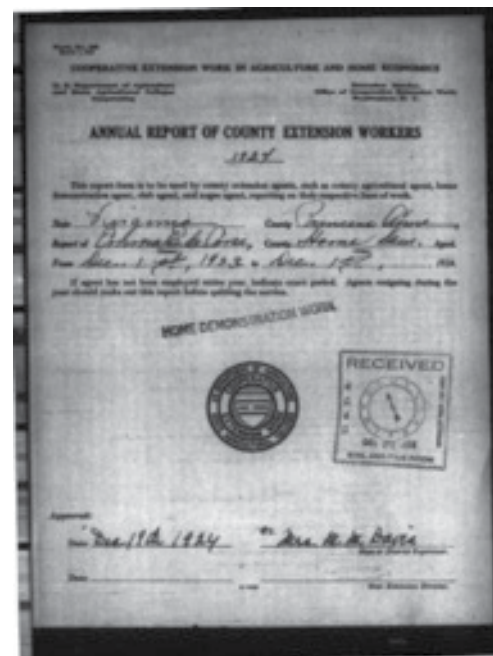
Julia Westblade, digital imaging coordinator; Inga Haugen, agricultural, life sciences and scholarly communication librarian; and Meagan Russell, agricultural librarian assistant and VCE historical documents lead, are using digitization technology to save farming history. They discussed their work in the presentation "Extension Microfilm Digitization Project: Putting History Into Our Hands" at the U.S. Agricultural Information Network Conference.

Their project included digitizing more than 141 microfilm reels of Virginia Cooperative Extension reports, which included more than 12,000 agricultural reports from Virginia State University, Virginia Tech, and Virginia Cooperative Extension from 1908 to 1968. Instead of physically visiting a library at each of these organizations to delve into this history, researchers and community members can access and search online.

"This treasure trove of information of Virginia history needed to be moved into a format that citizens and researchers could more easily access," said Haugen. "There is a natural limit of viability of the film, which limit was of concern."

This invaluable collection sheds light not only on the farming practices of the day but who was involved in Virginia's agriculture.

"These reports give concrete details of some underrepresented groups, like Black and women extension agents, to show how they have always been in agriculture," said Haugen. "This begins to address under-representation and to correct some of the historical records that had been skewed to white men. Creating more equity in the historical record creates more touchpoints for people to engage now."

Annual Narrative and Statistical Reports, 1908-1968
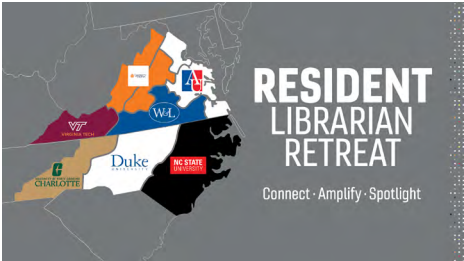
GOAL

DESTINATION FOR TALENT

University Libraries is a place to collaborate, innovate, create, and share. **We aspire to transform the way people experience knowledge through our efforts, help to attract bold and dynamic faculty, staff, and students to a diverse and inclusive community to be a force for positive change.**

The University Libraries highly values and encourages transdisciplinary discovery and evidence based, student-centered learning through its many resources and spaces.

The summit was a collaboration among the libraries of Virginia Tech, North Carolina State, Washington & Lee, Duke University, American University, and UNC-Charlotte, hosted by the University of Virginia Library

Academic library residency programs across the region offer the inaugural Resident Librarian Summit

Early-career library professionals serving residencies at participating institutions gathered at the University of Virginia for the inaugural Resident Librarian Summit. The summit, themed "Connect, Amplify, Spotlight," was designed to foster meaningful connections and new opportunities for collaboration and professional growth for resident librarians from Virginia Tech, North Carolina State, Washington & Lee, Duke University, American University, and UNC-Charlotte.

In University Libraries at Virginia Tech, resident positions are designed for recent graduates of a master's degree program or entry-level library, data, or information professionals. They participate in an intensive program where they work in data services, evidence synthesis, collections, metadata services, open education, or publishing services. The individualized program reflects the new librarian's professional interests and long-term career goals.

Eric Glenn, University Libraries' director of belonging, engagement, and organizational development and Roberto Silva, Head of Fralin Biomedical Research Institute Health Sciences and Technology Library, coordinators of the resident librarian program at Virginia Tech were excited about this initiative. Glenn said the summit allowed residents to gain insights into different residency programs, offering them a broad perspective.

"Our primary objective was to ensure that residents departed with a sense of enthusiasm and rejuvenation, ready to tackle the upcoming academic year with confidence," said Glenn. "We aimed to recognize and highlight the residents' significant contributions to the field, emphasizing their importance and impact. By fostering meaningful connections, we sought to expand cohort sizes and create new opportunities for collaboration and professional growth."

During the summit, the residents engaged in activities that encouraged team-building and networking and a program that offered a chance to learn from established professionals.

"Overall, the retreat was a fulfilling experience that accomplished its mission of connecting, amplifying, and spotlighting residents and program coordinators," said Glenn. "The participants left with renewed energy, expanded networks, and a strong sense of community. Mission accomplished."

Cozette Comer, Co-founder of Library Evidence Synthesis Services Symposium (LESSS)

Evidence Synthesis Services team members are leaders in the field

University Libraries' Cozette Comer co-founded with Jenessa McElfresh, University of Tennessee Health Sciences Center, the Library Evidence Synthesis Services Symposium (LESSS). The symposium is a free-to-attend three-day virtual professional development event for information professionals supporting evidence synthesis services in libraries and other information workplaces. The goal was to connect all evidence synthesis service providers, regardless of discipline, years of experience, and professional development budget.

More than 1,000 professionals from all over the world registered for the symposium. Due to high interest, the organizers added a fourth day to accept an additional 10 proposals, bringing the total acceptance rate to 61 percent.

"Each individual supporting evidence synthesis has knowledge to share," said Cozette Comer, assistant director of evidence synthesis services. "We hope that this event will allow this diverse community of professionals to learn from and support one another."

This year, Comer also contributed to the updated search guidance for the international social science research network, the Campbell Collaboration. Once published, this new document will be the standard guideline for search conduct in all Campbell Reviews. This kind of guidance also influences the conduct of reviews not formally affiliated with Campbell.

Campbell is the leader in producing evidence synthesis reviews and methodological guidelines in social sciences. The guidelines and educational resources influence how research is formally synthesized across the globe and the findings from these syntheses inform policy, practice, and future research.

"The Campbell Collaboration is a pillar in the field of evidence synthesis," said Comer. "It is very exciting for Virginia Tech to be contributing to the field in such important ways with other universities who have been leading the field."

Amanda MacDonald teaches students

Undergraduate Research Services team explores trends in developing career readiness

Undergraduate Research Services Coordinator Amanda MacDonald served on a [Council on Undergraduate Research](#) working group with a two-year charge of exploring undergraduate research as a tool for career readiness. This work resulted in two international poster presentations, an international oral presentation, a published protocol, and a forthcoming peer-reviewed journal article in the "Scholarship & Practice of Undergraduate Research," the council's academic journal.

The working group included higher education leaders in undergraduate research from Virginia Tech, Radford University, Elon University, St. John Fisher University, Stetson University, and University of Maryland.

"This working group and the associated research have given us a chance to recognize the shift in the value in higher education in the U.S. and to acknowledge the current reliance on implicit aspects of undergraduate research to develop career readiness skills is not enough," said MacDonald. "The hope is to provide concrete recommendations for the association and our peers who support undergraduate research."

GOAL

ENSURE INSTITUTIONAL EXCELLENCE

University Libraries will continue to be a collaborative partner in the university's academic enterprise by optimizing the efficiency and effectiveness of existing library programs and promoting collaborations beyond internal and external boundaries.

University Libraries is a key university-wide partner in research impact and intelligence to help advance university programs that are **among the best in the world and help them achieve international reputational excellence**.

Research intelligence and impact team's expertise and guidance tapped for building a successful program

Connie Stovall, Director for Research Impact & Intelligence

Academic research library teams from across the country reached out to University Libraries at Virginia Tech's research intelligence and impact experts to gather advice on how to build a successful research intelligence and impact program.

Texas A&M, Florida State, Chapman University, Carnegie Mellon, University of California-Riverside, University of Virginia, Syracuse, University of Chicago, University of Florida, Arizona State, University of Toronto, Oak Ridge National Lab, and Ohio State reached out to Director Connie Stovall for her expertise in building Virginia Tech library's successful team.

"They wanted to know about the expertise we have on our team," said Stovall. "They were interested in topics such as research evaluation, research impact metrics, thematic research landscapes, finding collaborators; products and services we're using; what tools we're using; how we're developing relationships—and what relationships—are important to providing these services; how we overcome challenges associated with impact data."

Stovall said that many libraries experience challenges when creating research intelligence and impact teams. It may be that there may be a lack of skill or confidence in their staff or it may be that there isn't enough buy-in from campus stakeholders.

She said her team is fortunate in the support the University Libraries has received from colleagues across campus.

"We have really good working relationships with the Office of Research and Innovation and Office of Analytics & Institutional Effectiveness," said Stovall. "Plus, our library leadership is willing to think outside of traditional roles for academic librarianship."

Clemson University library leaders visit to learn about services

Clemson University library leaders visited Newman Library in Blacksburg to learn about University Libraries at Virginia Tech services, resources, and expertise. The full afternoon visit included presentations about data services, publishing services, research collaboration and engagement including research impact services, and library studios featuring emerging technologies. The group also visited the Veterinary Medicine Library and learned more about that branch and its unique resources for veterinary medicine faculty and students.

Kitley in Volumetric capture technology

Experts provide access and training on volumetric capture technology

Hokies have a chance to experiment and innovate with the latest emerging technologies in University Libraries studios, including a state-of-the-art volumetric capture system to create immersive 3D content. With this system, users can generate detailed three-dimensional representations of objects or people in real time, creating new possibilities for research, education, and creative projects.

The volumetric capture setup employs multiple cameras to simultaneously record a subject from various angles. Sophisticated software then processes this data to reconstruct highly detailed 3D models or volumetric videos. These lifelike digital assets can be used in a wide range of applications, from virtual reality experiences to interactive educational materials.

The volumetric capture system is a game-changer for various disciplines, including digital media, engineering, education, and the arts. By offering the ability to create three-dimensional, real-time renderings, it opens up new possibilities for research, teaching, and creative projects.

Students and faculty can use the system to develop interactive simulations, enhance virtual reality (VR) and augmented reality (AR) applications, and push the boundaries of digital storytelling.

In 2023, Virginia Tech athletics explored the volumetric capture system's potential. Elizabeth Kitley, a three-time ACC Women's Basketball Player of the Year, was the first athlete to experiment with the technology.

"Former Virginia Tech Women's Basketball Director of Operations, Tim Clark, reached out to us to partner in creating innovative marketing materials. He brought Kitley along with him to look at the potential of this technology. The initial focus was on fan engagement, using augmented reality to add an immersive element to print material, such as posters," said Todd Ogle, the executive director of ARIES.

In the future, Ogle plans to use the same technology, combined with motion capture, to create high-fidelity digital twins of players for training, simulations, and promotional material.

During the summer of 2024, the Virtual Environment Studio enhanced its volumetric capture system through a generous gift from Electronic Arts, Inc. This contribution was made through EA's **PAIR** program (**P**artnerships for **A**cademia | **I**nnovation | **R**esearch), which is building an ecosystem with academia and institutions globally for inspiration and synergy.

"The new cameras allow the system to capture higher quality images and by extension, volumetric clouds, particularly in relation to color accuracy," said Jonathan Bradley, assistant director of Learning Environments and Innovative Technologies at University Libraries.

The new equipment will also simplify the syncing process between the cameras to make the overall setup easier and simpler, so Virginia Tech students, faculty, and staff can explore its capabilities and integrate it into teaching, learning, and research activities.

Research Impact and Intelligence Team: Emily Mazure, Connie Stovall, Rachel Miles, and Sarah Over

Research impact team is a strong partner for analyzing and reporting Virginia Tech's global impact

The research impact team increased its reach of research analytics and impact reporting across campus. In fiscal year 2024, the team created research impact reports and dashboards, or provided metric consultations to improve impact and enhance global distinction for:

> The Virginia-Maryland College of Veterinary Medicine

> College of Natural Resources and Environment

> Institute for Critical Technology and Applied Science

> Nanoscale Characterization and Fabrication Lab

> Materials Characterization Lab

> Pamplin College of Business

> Virginia Tech Carilion School of Medicine

> Department of Agricultural, Leadership, and Community Education

> College of Engineering

> School of Education

The team has seen an overall increase in interest in these services across the university. Many campus leaders are initially interested in gathering preliminary data or metrics but ultimately learn about trends in citation data, topical analysis, and interpretation of the data. For example, a college dean told the team that he uses topical analytic visualizations to explain complex research to college stakeholders.

"One of the biggest surprises is how much this work is valued and continues to be valued," said Rachel Miles, research impact coordinator. "I realize that we are valued in the university and that our work is valuable, but sometimes I underestimate my own contributions and how what I'm doing can be helpful in summarizing publication and citation data for reporting purposes. In addition, I love that my work can be used to further contribute to greater science communication efforts, such as the example of how the dean uses topical analytic visualizations. This is a key motivation for continuing this work and demonstrating the value and impact of it."

IN CONCLUSION

The University Libraries' strategic plan, based on the university's strategic plan, is the roadmap to ensure library services make a difference in the university's mission. As evidenced by University Libraries experts contributing and leading in areas such as evidence synthesis services, digital libraries, research intelligence and impact, emerging technologies, and open access to scholarship, University Libraries elevates the university's global-land grant mission and reputation.

Hokies use library resources and expertise to share, create, learn, teach, and research in traditional and new ways. University Libraries continues to be a key partner in Virginia Tech's academic, scholarship, and research endeavors.